Z
5076
M41

LIBRARY CATALOGUE
STATE BOARD OF AGRICULTURE
OF
MASSACHUSETTS

ALBERT R. MANN
LIBRARY

NEW YORK STATE COLLEGES
OF
AGRICULTURE AND HOME ECONOMICS

AT

CORNELL UNIVERSITY

Cornell University Library
Z 5076.M41
Classification and catalogue of the libr
3 1924 014 507 440
mann

Cornell University Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

http://www.archive.org/details/cu31924014507440

CLASSIFICATION AND CATALOGUE

OF THE

LIBRARY

OF THE

MASSACHUSETTS STATE BOARD OF AGRICULTURE.

ROOMS 134–136, STATE HOUSE, BOSTON.

PREPARED AND ARRANGED BY

FREDERICK H. FOWLER, B.Sc.,

First Clerk and Librarian, Office State Board of Agriculture.

JUNE 1, 1899.

BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.
1899.

Z
5076
M41

A. 140088

Commonwealth of Massachusetts.

OFFICE OF THE STATE BOARD OF AGRICULTURE,
BOSTON, June 1, 1899.

At the annual meeting of the State Board of Agriculture, held in Boston, Jan. 10, 1899, the report of the librarian was read, and a complete catalogue of the library was presented. The Board voted to accept the report and the catalogue. The Board further voted "That the catalogue prepared by the librarian be printed separately, in such form as shall be decided by the secretary and the chairman of the executive committee, at an expense not to exceed $200, the same to be paid from the appropriation for incidentals or for dissemination of useful information in agriculture."

In accordance with the above action, the secretary of the Board and the chairman of the executive committee authorize the publication of the catalogue in the form submitted by the librarian.

The catalogue is intended to be historical and educational, as well as indicative of the size and make-up of the library. The author has endeavored to be original in his plan, and he realizes that there may be errors and imperfections in his work. Should such be discovered, he desires that they be made known to this office, that they may be avoided in a possible future edition of the catalogue.

It is expected that the distribution will be largely to scientific libraries and to students and workers in the several branches of agricultural industry, who find it necessary to frequently consult material already published, and who, it is thought, will find this catalogue a help to them in their labors.

WILLIAM R. SESSIONS,
Secretary State Board of Agriculture.

PREFACE.

The State Board of Agriculture was established by an act of the Legislature of 1852, and was assigned rooms in the basement of the State House. Books of reference began to accumulate, and soon the nucleus of an office library was formed.* The first reference to such a library, in the volume known as the "Agriculture of Massachusetts," is in the secretary's report for 1857; the reference being as follows: "The agricultural library connected with the office of the secretary of the Board has now become the largest and most valuable collection of the kind in New England, and is probably the most extensive in the United States. A complete catalogue† is to be found in the Appendix, and is now published for the use of those who are active in creating similar agricultural libraries in the various towns of the Commonwealth."

The next reference is found in the secretary's report for 1860, and reads thus: "The State agricultural library, connected with my office, has received many valuable accessions during the past year, and is now one of the largest, if not one of the best selected, agricultural libraries in the United States. The collection of works on the honey-bee is believed to be the best and most extensive in the country."

Secretary Flint again refers to the library in his report for 1864, in the following language: "It is more generally used

* Report of the librarian, Agriculture of Massachusetts, 1897, pages 197-208; *Ibid.*, 1898, pages 257-263.

† This catalogue describes 844 volumes, 692 of which constituted the library proper, 125 the library of the Massachusetts Society for Promoting Agriculture, and 27 belonged to the Secretary of the Board, and were on deposit for public use under the same regulations as the office library.

for reference than ever before, especially during the sessions of the Legislature, and it is important that some permanent fund should be provided by which the new publications should be procured as they appear."

Again, in 1865, the secretary says that "the library connected with the office of the secretary has gradually but constantly grown, till it has become the best, with very few, if any, exceptions, to be found in the country. It is of great service to the public, more especially during the sessions of the Legislature, when it is largely used for consultation and reference."

Since that date the library has continued to grow in size and quality, until at the present time it contains 3,200 bound volumes, many of them rare and valuable, covering a wide range of subject matter, and so classified and arranged on the library shelves as to be of the greatest service possible. Shelf label holders are used, the various divisions and sections being indicated by Willson's gummed letters and figures. Additions are made from time to time by gift, by purchase, by exchange, and by binding pamphlets and similar publications.

Certain daily newspapers, also papers and magazines published in the interest of agriculture, horticulture, forestry, etc., are received and are kept on file on the large table in the library room. The library is the recipient almost daily of publications from one or more institutions represented on the exchange list.

In addition to the bound volumes referred to, there are quite a number of pamphlets on various subjects, many of which pamphlets are of considerable value.

The oldest book is "The Booke of the English Husbandman," printed in London, and bearing the date of 1635.

Some work has been done in the preparation of a card catalogue of subjects, there now being in use 1,080 such

cards. The subject index of the literature of agricultural experiment stations and kindred institutions, supplied by the United States Department of Agriculture, now comprises 17,600 cards, covering the years 1887–97. These index cards are filed in cases, and are available for consultation.

The library is primarily a reference library for the use of the agricultural department, but is used to quite an extent by others; and the earnest hope is expressed that all who wish to consult it will feel perfectly free to do so. It is open for consultation daily, between the hours of 9 A.M. and 5 P.M. The library is represented in the Massachusetts Library Club, the librarian being a member of said club.

F. H. FOWLER.

CLASSIFICATION OF THE LIBRARY.

	Vols.
DIVISION I. — Publications of the United States department of agriculture,	150
DIVISION II. — Experiment station publications,	180
DIVISION III. — General library,	2,851
Total,	3,181

DIVISION III.

CLASS I. Agriculture, reports, etc.,	1,031
II. Agriculture, theory and practice,	314
III. Horticulture,	342
IV. Domestic animals,	244
V. Natural sciences,	337
VI. Statistics,	235
VII. Education,	175
VIII. Miscellaneous,	173

	Vols.	
CLASS I. — AGRICULTURE, REPORTS, ETC.,		1,031
Sect. 1. Boards of agriculture, etc., reports,	458	
Sect. 2. Agricultural societies, transactions,	287	
Sect. 3. Farmers' institutes, proceedings,	20	
Sect. 4. Crop reports,	6	
Sect 5. Grange proceedings,	6	
Sect. 6. Dairy associations, etc., reports,	32	
Sect. 7. Produce exchanges, etc., reports,	19	
Sect. 8. Agricultural journals, etc.,	203	

CLASS II. — AGRICULTURE, THEORY AND PRACTICE,		314
Sect. 1. Agriculture, theory and practice,	140	
Sect. 2. Manures and fertilizers,	17	
Sect. 3. Drainage and irrigation,	19	
Sect. 4. Farm implements, machinery, buildings,	16	
Sect. 5. Field crops,	43	
Sect. 6. Market gardening, vegetables, mushrooms,	29	
Sect. 7. Glass houses: construction, management, crops,	9	
Sect. 8. Milk, butter, cheese,	8	
Sect. 9. Bees and bee keeping (apiculture),	33	

	Vols.
CLASS III. — HORTICULTURE,	342
	Vols.
Sect. 1. Horticultural societies, etc., transactions,	62
Sect. 2. Horticulture, general works,	29
Sect. 3. Flowers (floriculture),	47
Sect. 4. Forestry (arboriculture),	45
Sect. 5. Landscape gardening, rural architecture,	32
Sect. 6. Botany, vegetable physiology,	49
Sect. 7. Plant diseases: fungi and fungicides,	5
Sect. 8. Grapes (viticulture),	11
Sect. 9. Fruits (pomology),	62
CLASS IV. — DOMESTIC ANIMALS,	244
Sect. 1. Cattle: breeds, herdbooks,	49
Sect. 2. Cattle raising (dairying),	42
Sect. 3. Veterinary science, animal diseases,	60
Sect. 4. Sheep and wool,	24
Sect. 5. Swine,	3
Sect. 6. Horses,	42
Sect. 7. Dogs,	10
Sect. 8. Cats, rabbits, etc.,	3
Sect. 9. Poultry (aviculture),	11
CLASS V. — NATURAL SCIENCES,	337
Sect. 1. Chemistry,	44
Sect. 2. Geology, mineralogy, soils,	27
Sect. 3. Natural history, zoology,	53
Sect. 4. Biology, evolution, etc.,	6
Sect. 5. Insects and insecticides (entomology),	79
Sect. 6. Birds (ornithology),	37
Sect. 7. Climate, weather (meteorology),	11
Sect. 8. Fish and fish culture (pisciculture),	10
Sect. 9. Smithsonian Institution, etc., reports,	70
CLASS VI. — STATISTICS,	235
Sect. 1. Agriculture,	23
Sect. 2. Manufactures,	21
Sect. 3. Labor,	39
Sect. 4. Transportation, commerce,	40
Sect. 5. Finance,	19
Sect. 6. Taxation, revenue,	13
Sect. 7. Population, social,	18
Sect. 8. Public health,	20
Sect. 9. Miscellaneous,	42

	Vols.	
CLASS VII.—EDUCATION,		175
	Vols.	
Sect. 1. Education, reports,	10	
Sect. 2. Educational institutions, reports,	10	
Sect. 3. Encyclopædias,	42	
Sect. 4. Dictionaries,	19	
Sect. 5. History,	37	
Sect. 6. Biography,	4	
Sect. 7. Atlases,	7	
Sect. 8. Hand books,	18	
Sect. 9. Almanacs, calendars,	28	
CLASS VIII.—MISCELLANEOUS,		173
Sect. 1. Law,	66	
Sect. 2. Highways, roads,	9	
Sect. 3. Peoples, customs,	9	
Sect. 4. Domestic economy,	6	
Sect. 5. Mechanics, engineering,	8	
Sect. 6. Heating, ventilation,	11	
Sect. 7. Political economy,	9	
Sect. 8. Library,	7	
Sect. 9. General miscellany,	48	

Division I.

PUBLICATIONS OF THE UNITED STATES DEPARTMENT OF AGRICULTURE.*

1. Office of the Secretary.

Annual Reports.

Annual report of the commissioner of patents for the year 1847. Pp. 84-661 on agriculture. Edmund Burke. 1 vol. Ill. Washington.

Report of the commissioner of patents. Part II. Agriculture. 1849-51, Thomas Ewbank; 1852, Silas H. Hodges; 1853-56, Charles Mason; 1857, 1858, J. Holt; 1859, Wm. D. Bishop; 1860, S. T. Shugert; 1861, D. P. Holloway. 13 vols. Ill. Washington.

Report of the commissioner of agriculture. 1862-66, Isaac Newton; 1867, John W. Stokes; 1868-70, Horace Capron; 1871-76, Frederick Watts; 1877-80, Wm. G. LeDuc; 1881-84, Geo. B. Loring; 1885-88, Norman J. Colman. 26 vols. Ill. Washington.

Report of the secretary of agriculture. 1889-92, J. M. Rusk; 1893, J. Sterling Morton. 5 vols. Ill. Washington.

Year book of the United States department of agriculture. 1894-96, J. Sterling Morton; 1897, 1898, James Wilson. 5 vols. Ill. Washington.

Report of the secretary of agriculture, being part of the message and documents communicated to the two houses of congress. 1894, 1896, J. Sterling Morton. 2 vols. Washington.

Annual reports of the department of agriculture. Report of the secretary of agriculture. Departmental reports. 1897, 1898, James Wilson. 2 vols. Washington.

Monthly Reports.

Special Reports (Old Series).

No. 12. Investigation of diseases of swine, and infectious and contagious diseases incident to other classes of domesticated animals. 292 pp. Ill. Washington. 1879.

No. 22. Contagious diseases of the domesticated animals. 268 pp. Ill. Washington. 1880.

No. 28. Report on the culture of the sugar beet and the manufacture of sugar therefrom in France and the United States. Wm. McMurtrie. 294 pp. Ill. Washington. 1880.

---

* This list includes only bound volumes. There are in the library a large number of special reports, bulletins and circulars, in pamphlet form, which will be bound as opportunity offers.

Miscellaneous Reports (New Series).

Farmers' Bulletins.

Nos. 1–94 (1889–99). 3 vols. Ill. Washington.

Special Reports (Unnumbered).

Report of the commissioner of agriculture on the diseases of cattle in the United States. 205 pp. Ill. Washington. 1871.

Reports upon forestry. Franklin B. Hough and Nathaniel H. Egleston. 4 vols, maps and diagrams. Washington. 1878, 1880, 1882, 1884.

Special report on the beet-sugar industry in the United States. H. W. Wiley and Charles F. Saylor. 240 pp. Maps. Washington. 1898.

Section of Foreign Markets.

Bulletins.

Nos. 1–15 (1895–99). 1 vol. Washington.

2. Division of Accounts and Disbursements.

3. Bureau of Animal Industry.

Annual Reports.

Annual report of the bureau of animal industry. First–fourteenth (1884–97). D. E. Salmon. 9 vols. Ill. Washington.

Special Reports.

Hog cholera: its history, nature, and treatment, as determined by the inquiries and investigations of the bureau of animal industry. 197 pp. 16 plates. Washington. 1889.

The animal parasites of sheep. Cooper Curtice. 222 pp. 36 plates. Washington. 1890.

Special report on diseases of the horse. Drs Michener, Law, Harbaugh, Trumbower, Liautard, Holcombe, Huidekoper and Dickson. 556 pp. 44 plates. Washington. 1890.

Special report on the cause and prevention of swine plague. Results of experiments by Theobald Smith. 166 pp. 12 plates. Washington. 1891.

Special report on the history and present condition of the sheep industry of the United States. Ezra A. Carman, H. A. Heath and John Minto. 1000 pp. Ill. Washington. 1892.

Special report on diseases of cattle and on cattle feeding. Drs. Murray, Atkinson, Harbaugh, Lowe, Law, Dickson, Trumbower, Smith and Professor Henry. 496 pp. 44 plates. Washington. 1892.

Bulletins.

Nos. 1–21 (1893–98). 3 vols. Ill. Washington.

Publications of the Dairy Division.

Nos. 1–12 (1895–96). 1 vol. Ill. Washington.

4. Division of Botany.

Contributions from the United States National Herbarium.

Vol. II. Botany of western Texas. John M. Coulter. 588 pp. Ill. Washington. 1891–94.

Vol. IV. Botany of the Death Valley expedition. Frederick Vernon Coville. 363 pp. 21 plates. Map. Washington. 1893.

Special Reports.

The agricultural grasses of the United States. George Vasey. Also, The chemical composition of American grasses. Clifford Richardson. 144 pp. 120 plates. Washington. 1884.

5. Division of Chemistry.

Bulletins.

Nos. 13, 18–34, 43–49 (1887–93, 1888–92, 1894–97). 4 vols. Ill. Washington.

6. Document and Folding Room.

7. Division of Entomology.

United States Entomological Commission.

First. — Relating to the Rocky Mountain locust. 772 pp. Maps and ill. Washington. 1878.

Second. — Relating to the Rocky Mountain locust and the western cricket. 402 pp. Maps and ill. Washington. 1880.

Third. — Relating to the Rocky Mountain locust, the western cricket, the army worm, canker worms and the Hessian fly. 439 pp. Maps and ill. Washington. 1883.

Fourth. — Being a revised edition of bulletin No. 3, and the final report on the cotton worm, together with a chapter on the boll worm. Charles V. Riley. 546 pp. Maps and ill. Washington. 1885.

Fifth. — Being a revised and enlarged edition of bulletin No. 7, on insects injurious to forest and shade trees. Alpheus S. Packard. 957 pp. Wood-cuts and 38 plates. Washington. 1890.

Bulletins.

Nos. 22–33 (1890–94). New series. Nos. 1–8 (1895–97). 2 vols. Ill. Washington.

Insect Life.

Vols. I.–VI. (July, 1888, to August, 1894). Edited by C. V. Riley. Vol. VII. (September, 1894, to July, 1895). Edited by L. O. Howard. 7 vols. Ill. Washington.

General index to the seven volumes of Insect life. 1888–95. 145 pp. Washington. 1897.

Special Reports.

Bibliography of the more important contributions to American economic entomology. Samuel Henshaw. Parts I., II. and III. The more important writings of Benjamin Dann Walsh and Charles Valentine Riley. 454 pp. Washington. 1890.

Part V. The more important writings of government and state entomologists, and of other contributors to the literature of American economic entomology. L-Z. 179 pp. Washington. 1896.

8. Office of Experiment Stations.

Experiment Station Record.

Vols. I.-II. (1889-91). W. O. Atwater. Vols. III.-IV. (1891-93). A. W. Harris. Vols. V.-IX. (1893-98). A. C. True. 9 vols. Washington.

Bulletins.

Nos. 1-58 (1889-99). 6 vols. Ill. Washington.

Miscellaneous Bulletins (Series discontinued).

Nos. 1-3 (1889-91). 1 vol. Washington.

9. Office of Fiber Investigations.

Reports.

Nos. 1-9 (1892-97). 1 vol. Ill. Washington.

10. Division of Forestry.

Bulletins.

Nos. 1-5, 14-21 (1887-91, 1897-98). 2 vols. Ill. Washington.

11. Division of Gardens and Grounds.

12. Division of Illustrations.

13. Office of Irrigation Inquiry.

Special Reports.

Report on irrigation. 4 parts. R. J. Hinton, E. S. Nettleton, Robert Hay, J. W. Gregory and F. F. B. Coffin. 3 vols. Ill. Washington. 1892.

14. Library.

15. Division of Microscopy.

16. Division of Biological Survey (formerly Ornithology and Mammalogy).

Bulletins.

No. 1. The English sparrow (*Passer domesticus*) in North America, especially in its relations to agriculture. Walter B. Barrows. 405 pp. Map. Washington. 1889.

17. Division of Pomology.

18. Division of Publications (formerly Records and Editing).

Bulletins.

No. 1. Index to the annual reports of the United States department of agriculture for the years 1837 to 1893, inclusive. 252 pp. Washington. 1896.

No. 2. Synoptical index of the reports of the statistician, 1863 to 1894. Geo. F. Thompson. 258 pp. Washington. 1897.

No. 3. Historical sketch of the United States department of agriculture; its objects and present organization. Compiled by Charles H. Greathouse. Revised edition. 74 pp. Washington. 1898.

No. 4. Index to authors with titles of their publications appearing in the documents of the United States department of agriculture, 1841-97. Geo. F. Thompson. 303 pp. 1 vol. Washington. 1898.

19. Office of Road Inquiry.

Bulletins.

Nos. 1-18 (1894-95). 1 vol. Ill. Washington.

20. Seed Division.

21. Silk Section (discontinued June 30, 1891).

22. Division of Statistics.

Monthly Reports.

Nos. 1-25, 92-100 (1883-85, 1892). J. R. Dodge. Nos. 112-133 (1894, 1895). Henry A. Robinson. 5 vols. Washington.

Miscellaneous Reports.

Nos. 1-9 (1890-95). 1 vol. Washington.

Special Reports.

Album of agricultural statistics of the United States. J. R. Dodge. Second edition. 8 pp. 16 charts. Washington. 1891.

23. Division of Vegetable Pathology.

Journal of Mycology.

(Vols. I.-III. Edited by W. A. Kellerman, J. B. Ellis and B. M. Everhart. 1885-87. 1 vol. Manhattan, Kan.)

The journal of mycology: devoted to the study of fungi, especially in their relation to plant diseases. B. T. Galloway. Vols. 5-7 (1889-94). 2 vols. Ill. Washington.

Bulletins.

Nos. 1-7 (1891-94). 1 vol. Ill. Washington.

24. Weather Bureau.

Annual Reports.

Report of the chief of the weather bureau. 1891-92; 1897-98. 2 vols. Ill. Washington.

Bulletins.

Nos. 1-10 (1892-93). 1 vol. Ill. Washington.

25. Division of Agrostology.

Bulletins.

Nos. 1-12 (1895-98). 1 vol. Ill. Washington.

Division II.

EXPERIMENT STATION PUBLICATIONS.*

Maine, — Orono.

Annual Reports.

Annual report of the Maine fertilizer control and agricultural experiment station, 1886–87. Annual report of the Maine state college of agriculture and the mechanic arts. Part II. Agricultural experiment station, 1888. Annual report of the Maine state college agricultural experiment station, 1889, 1890. 1 vol. Ill.

New Hampshire, — Hanover, Durham.

Bulletins.

New Hampshire agricultural experiment station, Hanover. Bulletins Nos. 1–22 (1888–94). New Hampshire college agricultural experiment station, Durham. Bulletins 23–40 (1894–96). 1 vol. Ill.

Vermont, — Burlington.

Annual Reports.

State of Vermont. Annual report of the state agricultural experiment station. First–eighth (1887–94). University of Vermont and state agricultural college. Annual report of the Vermont agricultural experiment station. Tenth, eleventh (1896–97, 1897–98). 6 vols. Ill.

Bulletins.

Nos. 1–42 (1887–94). 1 vol. Ill.

Massachusetts, — Amherst.

Annual Reports.

Annual report of the board of control of the state agricultural experiment station (Pub. Doc. No. 33). First–twelfth (1883–94). 5 vols. Ill.

---

* This list includes only bound volumes. There are in the library a large number of annual reports and bulletins in pamphlet form, which will be bound as opportunity offers.

Annual report of the Hatch experiment station of the Massachusetts agricultural college (Pub. Doc. No. 33). Eighth–eleventh (1895–98). 1 vol. Ill.

Bulletins.

Massachusetts state agricultural experiment station. Nos. 1-57 (1883–95). 1 vol. Ill. Photographs of crops. Albums I.–IV. (1886-95).

Hatch experiment station of the Massachusetts agricultural college. Nos. 1–49 (1888-97). 3 vols. Ill.

Meteorological observatory of the Hatch experiment station, Massachusetts agricultural college. Nos. 1–60 (1889-93). 1 vol.

Harvard university. Bulletin of the Bussey institution (Jamaica Plain, Boston). Vol. I. (1874–76). 470 pp. 6 plates.

RHODE ISLAND, — KINGSTON.

Annual Reports.

Annual report of the board of managers of the Rhode Island state agricultural school * and experiment station. Part II. Agricultural experiment station. First–tenth (1888–97). 3 vols. Ill.

Bulletins.

Nos. 1–51 (1889–98). 2 vols. Ill.

CONNECTICUT, — NEW HAVEN, STORRS.

Annual Reports.

Annual report of the Connecticut agricultural experiment station. Eighth-eighteenth (1884-94). 3 vols. Ill.

Annual report of the Storrs school agricultural experiment station. First–eighth (1888–95). 2 vols. Ill.

Bulletins.

Connecticut agricultural experiment station. Nos. 80–116 (1884–93). 1 vol. Ill.

NEW YORK, — GENEVA, ITHACA.

Annual Reports.

Annual report of the board of control of the New York agricultural experiment station. First–sixteenth (1882–97). 14 vols. Ill.

Cornell university, college of agriculture. First annual report of the agricultural experiment station. 1888. (Contains also first four bulletins of the station.) 1 vol. Ill.

Bulletins.

New York agricultural experiment station. Nos. (No. CXVI., old series) 1–142, new series (1885-97). 5 vols. Ill.

Cornell university agricultural experimeut station. Nos. 1–141 (1888–97). 6 vols. Ill.

---

* Since May 19, 1892, "College of agriculture and mechanic arts."

NEW JERSEY, — NEW BRUNSWICK.

Annual Reports.

Annual report of the New Jersey state agricultural experiment station. First–eighth (1880–87). 2 vols. Annual report of the New Jersey state agricultural experiment station and the annual report of the New Jersey agricultural college experiment station. Ninth–eighteenth (first–tenth) (1888–97). 9 vols. Ill.

Bulletins.

New Jersey agricultural experiment station. Nos. XLI.–66 (1887–90). New Jersey agricultural college experiment station. 67–115 (1890–95). New Jersey agricultural experiment stations. 116–118 (1896). 3 vols. Ill.

PENNSYLVANIA, — STATE COLLEGE.

Annual Reports.

Report of the Pennsylvania state college. Agricultural chemistry and agricultural experiment work. 1886. Report of the Pennsylvania state college. Part II. Agricultural experiment station. 1887–97. 12 vols. Ill.

Bulletins.

The Pennsylvania state college agricultural experiment station. Nos. 1–19 (1887–92). 1 vol. Ill.

DELAWARE, — NEWARK.

Bulletins.

Delaware college agricultural experiment station. Nos. II.–XXXVI. (1888–97). 1 vol. Ill.

MARYLAND, — COLLEGE PARK.

Annual Reports.

Annual report of the Maryland agricultural experiment station at agricultural college. First–fourth (1888–91). 1 vol. Ill.

Bulletins.

Nos. 1–50 (1888–97). 2 vols. Ill.

VIRGINIA, — BLACKSBURG

Bulletins.

Virginia agricultural and mechanical college experiment station. Nos. 1–11 (1889–91). Virginia agricultural and mechanical college, agricultural experiment station. New series. Vols. I.–V., Nos. 12–71 (1892–96). 2 vols. Ill.

WEST VIRGINIA, — MORGANTOWN.

Bulletins.

West Virginia agricultural experiment station. Vols. I.–III., Nos. 1–36 (1888–94). 2 vols. Ill.

NORTH CAROLINA, — RALEIGH.

Annual Reports.

Annual report of the North Carolina agricultural experiment station. Fifth–fifteenth (1882–92). 4 vols. Ill.

Bulletins.

Nos. 69–123 (1890–95). 3 vols. Ill.

SOUTH CAROLINA, — FORT HILL, COLUMBIA.

Annual Reports.

Annual report of the South Carolina experiment stations. First–second (1888–89). 1 vol. Ill.

FLORIDA, — LAKE CITY.

Bulletins.

Experiment station of Florida, at the state agricultural college. Nos. 1–19 (1888–92). Florida agricultural experiment station. 20–43 (1893–97). 2 vols. Ill.

ALABAMA, — AUBURN.

Bulletins.

Agricultural experiment station of the agricultural and mechanical college. New series. Nos. 1–88 (1888–97). 4 vols. Ill.

MISSISSIPPI, — AGRICULTURAL COLLEGE.

Bulletins.

Mississippi agricultural experiment station. Nos. 1–14 (1888–91). Mississippi agricultural and mechanical college experiment station. 15–42 (1891–97). 1 vol. Ill.

LOUISIANA, — BATON ROUGE, CALHOUN, NEW ORLEANS.

Bulletins.

Louisiana state experiment stations. Second series. Nos. 1–49 (1890–97). 3 vols. Ill.

TEXAS, — COLLEGE STATION.

Bulletins.

Texas agricultural experiment station, agricultural and mechanical college of Texas. Nos. 1–49 (1888–98). 2 vols. Ill.

KENTUCKY, — LEXINGTON.

Annual Reports.

Annual report of the Kentucky agricultural experiment station of the state college of Kentucky. First–sixth (1888–93). 1 vol. Ill.

Bulletins.

Nos. 24–50 (1890–94). 1 vol. Ill.

OHIO, — COLUMBUS, WOOSTER.

Annual Reports.

Annual report of the Ohio agricultural experiment station. Fifth, sixth, eighth–sixteenth (1886, 1887, 1889–97). 5 vols. Ill.

*Bulletins.**

Vols. II.–VI. (1889–93). Whole number, 52. 53–84 (1894–97). Vol. II. No. I., is second series No. 8.

INDIANA, — LAFAYETTE.

Bulletins.

Purdue university agricultural experiment station. Vols. II.–VI., Nos. 32–57 (1890–95). 1 vol. Ill.

ILLINOIS, — CHAMPAIGN.

Bulletins.

University of Illinois agricultural experiment station. Vols. 1, 2. Nos. 1–36 (1888–94). 2 vols. Ill.

MICHIGAN, — AGRICULTURAL COLLEGE.

Bulletins.

Agricultural college of Michigan experiment station. Nos. 33–54 (1888, 1889). Michigan agricultural experiment station, state agricultural college. 55–102 (1889–93). Michigan state agricultural college experiment station. 103–134 (1894–96). 4 vols. Ill.

WISCONSIN, — MADISON.

Annual Reports.

Annual report of the agricultural experiment station of the university of Wisconsin. First–fifteenth (1883–98). 11 vols. Ill.

Bulletins.

Nos. 26–69 (1891–98). 2 vols. Ill.

---

* Bound with annual reports.

MINNESOTA, — ST. ANTHONY PARK.

Reports.

Biennial report of the Minnesota state agricultural experiment station. 1888–90. 1 vol.

Bulletins.

University of Minnesota. Experiment station of the college of agriculture. Nos. 1–7 (1888, 1889). University of Minnesota. Agricultural experiment station. 8–52 (1889–96). 3 vols. Ill.

IOWA, — AMES.

Bulletins.

Iowa agricultural experiment station. Nos. 1–19 (1888–92). Iowa agricultural college experiment station. 20–36 (1893–97). 3 vols. Ill.

ARKANSAS, — FAYETTEVILLE.

Bulletins.

Arkansas agricultural experiment station. Nos. 31–55 (1894–98). 1 vol. Ill.

MISSOURI, — COLUMBIA.

Bulletins.

Missouri agricultural college experiment station. Nos. 1–43 (1888–98). 2 vols. Ill.

KANSAS, — MANHATTAN.

Annual Reports.

Annual report of the experiment station, Kansas state agricultural college. First, second (1888, 1889). 1 vol. Ill.

Bulletins.

Nos. 1–81 (1888–98). 3 vols. Ill.

NEBRASKA, — LINCOLN.

Annual Reports.

University of Nebraska. Annual report of the agricultural experiment station of Nebraska. First–seventh (1887–93). In these reports are included bulletins Nos. 16–36. 4 vols. Ill.

Bulletins.

Vols. I.–VII., Nos. 1–41 (1887–95). 4 vols. Ill.

SOUTH DAKOTA, — BROOKINGS.

Annual Reports.

Annual report of the United States agricultural experiment station for Dakota.* First–third (1888–90). Annual report of the agricultural experiment station for South Dakota. Fourth–eighth (1891–95). These reports include bulletins Nos. 26–31, 37–44. 1 vol. Ill.

---

* South in 1889.

Bulletins.

Nos. 1–60 (1887–98). 2 vols. Ill.

COLORADO, — FORT COLLINS.

Annual Reports.

The state agricultural college of the state of Colorado. Annual report of the agricultural experiment station. First–eleventh (1888–98). 2 vols. Ill.

Bulletins.

Nos. 1–37 (1887–97). 2 vols. Ill. Bulletins 31 and 37 constitute technical series, Nos. 1 and 2.

WYOMING, — LARAMIE.

Bulletins.

University of Wyoming. Agricultural college department. Wyoming experiment station. Nos. 1–20 (1891–94). 1 vol. Ill.

UTAH, — LOGAN.

Annual Reports.

Annual report of the Utah agricultural college experiment station. First–fourth (1890–93). 1 vol.

Bulletins.

Nos. 1–57 (1890–98). 2 vols. Ill.

OREGON, — CORVALLIS.

Bulletins.

Oregon agricultural experiment station. Nos. 1–31 (1888–94). 1 vol. Ill.

CALIFORNIA, — BERKELEY.

Annual Reports.

University of California. College of agriculture. Report of the professor in charge to the president. 1884. This volume contains also bulletins 2, 5, 22 and 29. Report of work of the agricultural experiment stations of the university of California. 1883–95. 4 vols. Ill.

CANADA, — OTTAWA.

Annual Reports.

Experimental farms reports. Appendix to the report of the minister of agriculture. 1892–96. 2 vols. Ill.

Division III.

GENERAL LIBRARY.

Class I., Section 1. — Boards of Agriculture, etc., Reports.*

Maine. — Annual report of the secretary of the Maine board of agriculture: † second-seventeenth (1857-72), S. L. Goodale; eighteenth-twentieth, twenty-second, twenty-third (1873-75, 1877, 1878), S. L. Boardman; twenty-fourth-thirty-fourth (1880-90), Z. A. Gilbert; thirty-fourth-fortieth (1891-97), B. Walker McKeen. Augusta. 39 vols.

General index. 1850-75. S. L. Boardman. 24 pp. Augusta. 1876. Pamphlet.

Agricultural bibliography of Maine. Biographical sketches of Maine writers on agriculture, with a catalogue of their works; and an index to the volumes on the agriculture of Maine, from 1850 to 1892. Samuel L. Boardman. 117 pp. Augusta. 1893. Pamphlet.

New Hampshire. — Annual report of the board of agriculture: second, fourth-sixteenth (1872, 1874-86), James O. Adams; seventeenth-twenty-fourth (1887-96),‡ N. J. Bachelder. Concord. 21 vols.

Vermont. — Biennial report of the Vermont state board of agriculture, manufactures and mining: first, second (1872, 1874), Peter Collier. Report of the Vermont board of agriculture: fourth, fifth (1877, 1878), Henry M. Seely. Report upon Vermont agriculture by the superintendent of agricultural affairs: sixth (1879), John B. Mead. Vermont agricultural report by the state board of agriculture: seventh-ninth (1881-86), Hiram A. Cutting; tenth-twelfth (1887-92), W. W. Cooke; thirteenth-sixteenth (1893-96), C. M. Winslow; seventeenth, eighteenth (1897, 1898), Victor I. Spear. Montpelier, Burlington. 16 vols.

Massachusetts. — Report of the agriculture of Massachusetts, 1837-40. Henry Colman. Transactions of the agricultural societies in the state of Massachusetts: 1845, 1846, John G. Palfrey; 1847-49, Wm. B. Calhoun; 1850-52, Amasa Walker. Annual report of the secre-

* These volumes frequently contain annual reports of state pomological and horticultural societies, dairymen's associations, experiment stations, cattle commissions, etc.

† The volumes for 1861 and 1862 contain reports upon the natural history and geology of the state of Maine.

‡ Now published biennially.

tary of the Massachusetts board of agriculture: first–twenty-seventh (1853–79), Charles L. Flint; twenty-eighth–thirty-fourth (1880–86), John E. Russell; thirty-fifth–forty-sixth (1887–98), William R. Sessions. Boston.

Agriculture of Massachusetts: synoptical and analytical index, 1837–92. F. H. Fowler. 301 pp. Boston. 1893. 54 vols.

Rhode Island. — Annual report of the state board of agriculture: first–fourth (1885–88), Charles W. Smith; fifth–seventh (1889–91), David S. Collins; eighth–thirteenth (1892–97), Geo. A. Stockwell. Providence. 12 vols.

Connecticut. — Annual report of the secretary of the Connecticut board of agriculture: first–thirty-second (1866–98), T. S. Gold. Hartford. 32 vols.

New York. — Memoirs of the board of agriculture of the state of New York. Vols. I.–III. (1821–26). Annual report of the commissioner of agriculture (in three parts): first–third (1893–95), Fred. C. Schraub; fourth (1896), Charles A. Wieting. Albany. 11 vols.

New Jersey. — Annual report of the New Jersey board of agriculture: twelfth (1884), P. T. Quinn; thirteenth, fourteenth (1885, 1886), William S. Taylor. Annual report of the state board of agriculture: fifteenth–twenty-sixth (1887–98), Franklin Dye. Trenton. 15 vols.

Second and third (1874, 1875). Pamphlets.

Pennsylvania. — Agriculture of Pennsylvania: 1878–93, Thos. J. Edge. Annual report of the Pennsylvania department of agriculture: first–third (1895–97), Thos. J. Edge. Harrisburg. 20 vols.

Forty-seventh quarterly report, 1892. Pamphlet.

Bulletins: 1, 3, 4, 6–25, 27–32, 34–41, 43, 44, 49. Unbound.

Delaware. — Biennial report of the state board of agriculture: first (1888–89), Manlove Hayes. Milford. 1 vol.

Virginia. — Annual report of the commissioner of agriculture: twelfth–nineteenth (1890–97), Thomas Whitehead. Richmond. 6 vols.

Fourth, sixth, tenth (1880, 1882, 1888). Pamphlets.

West Virginia — Biennial report of the West Virginia state board of agriculture: third (1895–96), C. C. Brown; fourth (1897–98), D. M. Sullivan. Charleston. 2 vols.

South Carolina. — Annual report of the commissioner of agriculture of the state of South Carolina: first (1880), A. P. Butler. Charleston. Pamphlet.

Georgia. — Publications of the Georgia state department of agriculture: vols. IX., XII.–XIV. (1883, 1886–88), J. T. Henderson; XVIII.–XXIII. (1892–97), R. T. Nesbitt. Atlanta. 10 vols.

Second, third, sixth (1875, 1876, 1880). Pamphlets.

Louisiana. — Biennial report of the commissioner of agriculture of the state of Louisiana: first–third (1886–90), T. J. Bird; fifth (1894), H. C. Newsom; sixth (1896), A. V. Carter; seventh (1898), J. G. Lee. Baton Rouge. 5 vols.

Texas. — Annual report of the agricultural bureau of the department of agriculture, insurance, statistics and history: first, second (1887–88,

1888-89), L. L. Foster; fourth-sixth (1890-93), Jno. E. Hollingsworth; seventh-ninth (1893-95), A. J. Rose. Austin. 6 vols.

Arkansas. — Biennial report from the bureau of mines, manufactures and agriculture, of the state of Arkansas: first, second (1889-90, 1891-92), M. F. Locke; third, fourth (1893-94, 1895-96), W. G. Vincenheller. Little Rock. 4 vols.

Missouri. — Annual report of the Missouri state board of agriculture: first-fourth (1865-68), L. D. Morse. Annual report of the state board of agriculture of the state of Missouri: * fifth, sixth (1869, 1870), Chas. W. Murtfeldt; seventh, eighth (1871, 1872), John F. Wielandy; tenth (1874), John S. Marmaduke; sixteenth-nineteenth, twenty-first (1882-87, 1888-89), J. W. Sanborn; twenty-second, twenty-fourth (1889-90, 1891), Levi Chubbuck; twenty-ninth (1896), J. R. Rippey. Jefferson City. 17 vols.

Tennessee. — Biennial report of the commissioner of agriculture, statistics and mines of the state of Tennessee: 1885-86, A. J. McWhirter. Biennial report of the bureau of agriculture, statistics and immigration: 1889-90, B. M. Hord. Biennial report of the bureau of agriculture: 1893-94, 1895-96, T. F. P. Allison; 1897-98, J. T. Essary. Nashville. 5 vols.

Biennial report, 1891-92, D. G. Godwin. Pamphlet.

Kentucky. — Annual report from the state bureau of agriculture, horticulture and statistics: second (1879), Winston J. Davie; fifth (1882), C. E. Bowman. Biennial report from the bureau of agriculture, labor and statistics of the state of Kentucky: ninth (1891), Chas. Y. Wilson; twelfth (1897), Lucas Moore. Frankfort. 4 vols.

Ohio. — Annual report of the board of agriculture of the state of Ohio: fourth (1849), M. B. Bateham; fifth-seventh (1850-52), W. W. Mather; tenth, eleventh (1855, 1856), G. Sprague; twelfth-thirty-second (1857-77), John H. Klippart; thirty-third, thirty-fourth (1878, 1879), Jas. W. Fleming; thirty-fifth, thirty-sixth, thirty-eighth-fortieth (1880, 1881, 1883-85), W. I. Chamberlain; forty-first-forty-eighth (1886-93), L. N. Bonham; forty-ninth-fifty-second (1894-97) W. W. Miller. Columbus. 46 vols.

Indiana. — Annual report of the Indiana state board of agriculture: first (1852), John B. Dillon; twelfth (1870), Joseph Poole; fourteenth, twenty-sixth, twenty-seventh, thirtieth-thirty-ninth (1872, 1876, 1877, 1880-89), Alex. Heron; fortieth, forty-second (1890, 1892), Leon T. Bagley; forty-third-forty-sixth (1893-96), Charles F. Kennedy. Indianapolis. 21 vols.

Illinois. — Transactions of the department of agriculture of the state of Illinois: vols. 9-12 (1871-74), A. M. Garland; 13-20, 22 (1875-82, 1884), S. D. Fisher; 23-26 (1885-88), Charles F. Mills; 27-29, 31-33 (1889-91, 1893-95), W. C. Garrard. Springfield. 23 vols.

Michigan. — Annual report of the secretary of the state board of agriculture of the state of Michigan: third, fifth-ninth (1864, 1866-70),

---

* Contains annual reports on the noxious, beneficial and other insects of the state of Missouri, by C. V. Riley.

Sanford Howard; tenth, eleventh (1871, 1872), Richard Haigh, Jr.; twelfth, thirteenth (1873, 1874), William H. Marston; fourteenth-twenty-third (1875-84), Robert G. Baird; twenty-fourth-thirty-first (1885-92), Henry G. Reynolds; thirty-second-thirty-fifth (1893-96), Ira H. Butterfield. Lansing.

General index of Michigan agricultural reports, etc. 1862-88. Henry G. Reynolds. 370 pp. Lansing. 1889. 31 vols.

North Dakota. — Biennial report of the commissioner of agriculture and labor to the governor of North Dakota: first, second (1890, 1892), H. T. Helgesen; third (1894), Nelson Williams. Bismarck. 3 vols.

Fifth biennial report (1897-98). H. U. Thomas. Pamphlet.

Special report, 1893. Nelson Williams. 31 pp. Pamphlet.

Nebraska. — Annual report of the president and secretary of the Nebraska state board of agriculture: fourth (1873), R. W. Furnas, president, D. H. Wheeler, secretary. Transactions of the state board of agriculture, state of Nebraska: 1879-82, 1883, Dan'l H. Wheeler. Annual report Nebraska state board of agriculture: 1884-96, Robert W. Furnas. Lincoln. 13 vols.

Second annual report, 1869. Pamphlet.

Kansas. — Kansas state board of agriculture. Annual reports: first, second, fifth (1872, 1873, 1876), Alfred Gray. Biennial reports: first (vol. VI., 1877-78), Alfred Gray; fourth, fifth (vols. IX., X., 1883-84, 1885-86), Wm. Sims; sixth-eighth (vols. XI.-XIII., 1887-92), M. Mohler; ninth-eleventh (vols. XIV.-XVI., 1893-98), F. D. Coburn. Topeka. 12 vols.

Quarterly reports: 1889-93, M. Mohler; 1894-99, F. D. Coburn. Unbound.

Proceedings of the nineteenth annual meeting, 1890. M. Mohler. 169 pp.

Report for the years 1891 and 1893. M. Mohler. Pamphlets.

World's fair report, 1893. M. Mohler. 60 pp. Pamphlet.

Colorado. — Annual report of the state board of agriculture and the state agricultural college, etc.: seventeenth, eighteenth (1895, 1896), Daniel W. Working; twentieth (1898), James E. DuBois. Denver. Pamphlets.

Ontario. — Annual report of the department of agriculture for the Province of Ontario: 1885, Arthur S. Hardy; 1892-96, John Dryden. Toronto. 10 vols.

New Brunswick. — Report on agriculture for the Province of New Brunswick. 1897, 1898. Chas. H. Labillois. Fredericton. 2 vols.

Report for 1887. Chas. H. Lugrin. Pamphlet.

Report on the agricultural capabilities of the Province of New Brunswick, J. F. W. Johnston. Second edition. 95 pp. Fredericton. 1850.

Nova Scotia. — Annual report of the secretary for agriculture: 1893-94, George Lawson; 1895-97, B. W. Chipman. Halifax 1 vol.

Annual report, 1898. B. W. Chipman. Pamphlet.

British Columbia. — Report of the department of agriculture of the Province of British Columbia: first-fourth (1891-94), James R. Anderson; fifth (1895-96), J. H. Turner. Victoria. 2 vols.

Victoria.—Department of lands and agriculture. Annual report of the secretary for agriculture: second, third (1874, 1875), A. R. Wallis. Melbourne. 2 vols.

New South Wales.—Annual report of the department of agriculture. 1889. Peter McLean. Brisbane. Pamphlet.

Report on agriculture and forestry. 1894, 1895, 1898. Sydney. Pamphlets.

Algeria.—Colonisation et Agriculture de L'Algérie. Par L. Moll. 2 vols. 1,008 pp. Paris. 1845.

Flanders.—A report on the agriculture of eastern and western Flanders. Rev. Thomas Radcliff. 329 pp. Ill. London. 1819.

L'Agriculture pratique de la Flandre. Par M. J. -L. van Aelbroeck. 352 pp. Paris. 1830. This volume contains a supplement of 48 pp. Paris. 1833.

France.—Agriculture Française. Par MM. les Inspecteurs de L'Agriculture: Départment de La Haute-Garonne, 302 pp., Paris, 1843; Départment des Hautes-Pyrénées, 374 pp., Paris, 1843; Départment des Cotes-du-Nord, 370 pp., Paris, 1844; Départment du Tarn, 484 pp., Paris, 1845; Départment de L'Aude, 306 pp., Paris, 1847; Départment du Nord, 422 pp., Paris, 1843. 6 vols.

Études sur les Colonies Agricoles—Hollande—Suisse—Belgique—France Par MM. G. de Lurieu et H. Romand. 441 pp. Paris. 1851. This volume includes "Recherches sur L'Agriculture et L'Horticulture des Chinois, par Le Baron Leon D'Hervey-Saint-Denys." 262 pp. Paris. 1850.

Bulletin Documents officiels,—statisque,—rapports, comptes rendus de missions en France et a L'Étranger. Cinquème année (1886), No. 6; Sixième année (1887), Nos. 3–6, 8; Septième-Dix-Septième années (1888–98). Ministère de L'Agriculture. Paris. Unbound.

Italy.—Annali di Agricoltura, 1888. Relazione intorno ai lavori della R. Stazione di Entomologia Agraria di Firenze per gli anni 1883–84–85. Ad. Targioni Tozzetti. 533 pp. Ill. Firenze. 1888.

CLASS I., SECTION 2.—AGRICULTURAL SOCIETIES, TRANSACTIONS.

New Hampshire.—Transactions of the New Hampshire state agricultural society: 1850–52, prepared by committee on publication; 1853–57, James O. Adams, Concord; 1858, J. C. A. Wingate, Manchester; 1859, 1860, Aaron Young, Dover. 9 vols.

Massachusetts.—Transactions of the Bristol county agricultural society, 1862–73, 1884–94; Annual report of the Deerfield Valley agricultural society, 1871–89; Transactions of the Essex agricultural society, vols. I.–XIII. (1818–95); Transactions of the Hampshire agricultural society, 1867–88; Transactions of the Hampshire, Franklin and Hampden agricultural society, fifty-fourth–seventy-eighth annual reports (1872–96); Transactions of the Highland agricultural society, 1872–91; Transactions of the Hingham agricultural and horticultural society, 1858–94; Transactions of the Hoosac Valley agricultural society, sixteenth–twenty-ninth annual reports (1875–88); Trans-

actions of the Housatonic agricultural society, 1867-96; Transactions of the Marshfield agricultural and horticultural society, 1877-89; Transactions of the Martha's Vineyard agricultural society, 1868-96; Report of the Middlesex north agricultural society, 1875-91; Transactions of the Middlesex south agricultural society, 1862-75; Transactions of the Nantucket agricultural society, 1872-90; Transactions of the Norfolk agricultural society, 1849-76; Transactions of the Plymouth county agricultural society, 1870-88; Transactions of the Union agricultural and horticultural society, 1881-93; Transactions of the Worcester agricultural society, twenty-fifth-forty-first, sixty-eighth-seventy-eighth annual reports (1843-59, 1886-96); Transactions of the Worcester north agricultural society, 1853-59, 1867-88; Transactions of the Worcester north-west agricultural and mechanical society, 1867-89; Annual report of the Worcester south agricultural society, twenty-first-forty-second (1875-96); Annual report of the Worcester south-east agricultural society, twelfth-twenty-second (1871-82); Transactions of the Worcester county west agricultural society, 1867-94. The Massachusetts agricultural repository and journal, published by the trustees of the Massachusetts society for promoting agriculture: vols I.-X. (1793-1827); Transactions of the Massachusetts society for promoting agriculture, new series, vol. I., 1858-60; Centennial year (1792-1892) of the Massachusetts society for promoting agriculture. 146 pp. Salem. 1892. 62 vols.

Rhode Island. — Transactions of the Rhode Island society for the encouragement of domestic industry. 1850-53, 1856-58. Providence. 2 vols.

Connecticut. — Transactions of the Connecticut state agricultural society. 1854-57. Henry A. Dyer. Hartford. 4 vols.

New York. — Transactions of the New York state agricultural society: vols I., II. (1841, 42), Luther Tucker; III. (1843), Henry O'Reilly; IV. (1844), Luther Tucker; V. (1845), J. B. Nott; VI.-XXVII. (1846-67), B. P. Johnson; XXVIII.-XXXI. (1868-71), T. L. Harison; XXXII.-XXXIV. (1872-86); fifty-first annual report (1891), W. Judson Smith; fifty-second annual report (1892), G. Howard Davison. Albany. 37 vols.

Annual report of the American institute of the city of New York: third, fifth, sixth (1844, 1846, 1847), T. B. Wakeman; seventh (1848), John W. Chambers; eighth-twelfth (1849-53), Adoniram Chandler; thirteenth (1854), Peter B. Mead; fourteenth-seventeenth (1855-58), W. B. Leonard; eighteenth, nineteenth (1859, 1860), Thomas McElrath; twentieth (1861), James Renwick; twenty-first (1862), John W. Chambers; twenty-second (1863), Thomas McElrath; twenty-third-thirty-first (1864-72), Samuel D. Tillman. New York. 26 vols.

Pennsylvania. — Hints for American husbandmen, with communications to the Pennsylvania agricultural society. 1827. Philadelphia.

Annual report of the transactions of the Pennsylvania state agricultural society: first (1853), Fred'k Watts; second-fourth (1854-56), Rob't C. Walker; fifth (1857), A. O. Hiester; vols. VI.-XII. (1861-77). Harrisburg. 12 vols.

Louisiana. — Proceedings of the annual session of the Louisiana state agricultural society: first-fourth (1887-90), T. J. Bird; fifth, sixth (1891, 1892), T. S. Adams; eighth (1894), H. C. Newsom; ninth, tenth (1895, 1896), A. V. Carter; eleventh-thirteenth* (1897-99), J. G Lee. Baton Rouge. Unbound.

Illinois. — Transactions of the Illinois state agricultural society. Vols. IV.-VIII. (1859-60, 1865-70). John P. Reynolds. Springfield. 5 vols.

Michigan. — Transactions of the Michigan state agricultural society. Vols. III -VIII. (1851-56). J. C. Holmes. Lansing. 6 vols.

Wisconsin. — Transactions of the Wisconsin state agricultural society: vols. II., III. (1852, 1853), Albert C. Ingham; V., VIII., IX. (1858-59, 1869, 1870), J. W. Hoyt; XII -XV. (1873-76), W. W. Field; XVI.-XX. (1877-81), Geo. E. Bryant; XXI.-XXIII. (1882-85), Clinton Babbitt; XXV., XXVII., XXVIII. (1887, 1889, 1890), T. L. Newton; XXIX.-XXXII. (1891-94), John M. True; XXXIII. (1895), T. J. Fleming. Madison. 21 vols.

Iowa — Annual report of the Iowa state agricultural society: seventh, eighth (1860, 1861), J. H. Wallace; 1863-70, 1872, 1873, J. M. Shaffer; 1874-92, John R. Shaffer; forty-second, forty-third (1895, 1896), P. L. Fowler. Des Moines. 33 vols.

California. — Transactions of the California state agricultural society: 1858-60, O. C. Wheeler; 1863-72, I. N. Hoag; 1873, 1874, Robert Beck; 1881, 1886, 1892, Edwin F. Smith. Sacramento. 14 vols.

United States. — The journal of the United States agricultural society: vols. I.-III. (1852-56), Wm. S. King; IV. (1858), Ben. Perley Poore. Washington 4 vols.

The journal of the American agricultural association. Vol. I, No. 1. Joseph H. Reall. 260 pp. New York. 1881.

Addresses delivered at fairs of agricultural societies: by Henry Colman, Gen. Lewis Cass, Stephen A. Douglas, William S. King, Marshall P. Wilder, William H. Seward, George S. Boutwell, Edward Everett, Charles L. Flint, Josiah Quincy, Horatio Seymour and others. 2 vols.

Proceedings of the Associated agricultural convention, held at the State House, in Boston, March 20, 1851. Pamphlet.

Proceedings of the National agricultural congress, held at St. Louis, 1872, and at Philadelphia, 1876. Pamphlets.

Report of the tenth annual session of the National farmers' congress of the United States, held at Council Bluffs, Ia., 1890; and eighteenth, at Fort Worth, Tex., 1898. Pamphlets.

Proceedings of the society for the promotion of agricultural science: fourth and fifth meetings, 1883, 1884; eighteenth annual meeting, 1897. Pamphlets.

England — The journal of the Royal agricultural society of England: vol. XV. (1854). Second series, vols. XVII.-XXII. (1881-86),† H. M. Jenkins; XXIII.-XXV. (1887-89), Ernest Clarke. Third

---

* Includes second annual report of the "Louisiana stock breeders' association."

† General Index to vols. XI.-XX., second series, 176 pp, is included in vol. XXI.

series, vols. I.–IX. (1890–98), Ernest Clarke. General index to the second series of the journal of the Royal agricultural society of England, vols. I.–XXV. (1865–89), Ernest Clarke. 242 pp. London. 1890. 38 vols.

Scotland. — Prize-essays and transactions of the Highland and agricultural society of Scotland New series, vols. I.–VIII. (1829–43). Edinburgh and London. 8 vols.

The journal of agriculture and the transactions of the Highland and agricultural society of Scotland. Nos. 51, 52, 55–58, 61–65, 67–71, 76 (quarterly, January, 1856–March, 1862). Edinburgh and London. Unbound.

Hawaii. — The transactions of the Royal Hawaiian agricultural society. Vol. I. (1850–53). Edward P. Bond. Honolulu. 1 vol.

India. — Transactions of the agricultural and horticultural society of India. Vol. VII. (1840). Calcutta. 1 vol.

Class I., Section 3. — Farmers' Institutes, Proceedings.

Louisiana. — Louisiana farmers' institutes: bulletin No. 1 (1897), J. G. Lee. Baton Rouge. Pamphlet.

Michigan. — Michigan state agricultural college farmers' institutes: special institute bulletin, May, 1895, I. H. Butterfield. Michigan state farmers' institutes: institute bulletins Nos. 2–4 (1895–98), Kenyon L. Butterfield. Agricultural college. 3 vols.

Minnesota. — Minnesota farmers' institutes: annuals 4–9 (1891–96), O. C. Gregg. Minneapolis. 2 vols.

Annual No. 10 (1897). Pamphlet.

Wisconsin. — Wisconsin farmers' institutes: bulletins Nos 1–7 (1887–93), W. H. Morrison; 8–12 (1894–98), Geo. McKerrow. Madison. 12 vols.

Ontario. — Report of the proceedings of the permanent central farmers' institute of Ontario: second–seventh annual meetings (1889–93), A. Hamilton Pettit, Grimsby. Report of the superintendent of farmers' institutes of the Province of Ontario: first–fourth (1894–97), F. W. Hodson. Toronto. 3 vols.

Manitoba. — The Manitoba central farmers' institute: fourth annual meeting (1895). Winnipeg. Pamphlet.

Class I., Section 4. — Crop Reports.

Maine. — Maine state board of agriculture. Crop bulletin: 1891, Z. A. Gilbert; 1892–94, B. Walker McKeen. Board bulletin: 1895–97, B. Walker McKeen. Augusta. 2 vols.

Massachusetts. — Massachusetts crop report: 1888–99, Wm. R. Sessions. Indexes in bulletins for October, 1892, and October, 1895. Boston. 4 vols.

Specimen copies crop reports: New Jersey, Virginia, Georgia, Louisiana, Kentucky, Tennessee, Missouri, Illinois, Kansas, Michigan, Nova Scotia and New South Wales.

CLASS I., SECTION 5. — GRANGE PROCEEDINGS.

United States. — Journal of proceedings of the National grange of the patrons of husbandry: seventh-twenty-second, twenty-seventh-thirtieth (1874-88, 1893-96). 4 vols

Twenty-fourth-twenty-sixth, thirty-first, thirty-second (1890-92, 1897, 1898). Unbound.

Massachusetts. — Proceedings of the Massachusetts state grange, patrons of husbandry: fourteenth-twenty-second (1886-94). 2 vols.

Thirteenth, twenty-third-twenty-sixth (1885, 1895-98). Unbound.

CLASS I., SECTION 6. — DAIRY ASSOCIATIONS, ETC., REPORTS

Maine. — Annual report of the Maine dairymen's association. Bound in "Agriculture of Maine."

New Hampshire. — Annual meeting of the Granite state dairymen's association: sixth, ninth, tenth, twelfth (1890, 1893, 1894, 1896), J. L. Gerrish. Webster. Unbound.

Vermont. — Transactions of the Vermont dairymens' association: first-eighth (1869-77), O S. Bliss, Georgia; fourteenth (1883), O. M. Tinkham, North Pomfret; seventeenth, nineteenth, twentieth (1887, 1889, 1890), E. L. Bass, West Randolph; twenty-first-twenty-third (1891-93), Jas. K. Curtis, Georgia; twenty-fourth-twenty-sixth (1893-96), Geo. W. Pierce, Brattleboro. 4 vols.

Massachusetts. — Annual report of the Massachusetts cheese manufacturers' association: first, second, fourth, sixth, seventh (1865, 1866, 1868, 1870, 1871), N. S. Hubbard. Brimfield. Unbound.

Annual report of the state dairy bureau: first-eighth (1891-98). Geo. M. Whitaker. Pub. Doc. No. 60 Boston. Unbound.

Annual report of the department for the inspection of milk and vinegar,* city of Boston: twenty-eighth-thirtieth (1886-88), James F. Babcock; thirty-first-thirty-sixth (1889-94), Charles Harrington. 1 vol.

Fifteenth (1873), Henry Faxon; twenty-first (1879), Martin Griffin. Pamphlets.

Connecticut. — Report of the dairy commissioner of Connecticut: first, second (1887, 1889), J. B. Tatem; third, fourth (1893, 1894), G. D. Winslow; fifth (1895), C. S. Burlingame; sixth-eighth (1896-98), John B. Noble. Hartford. 1 vol.

Proceedings of the annual meeting of the Connecticut dairymen's association: sixteenth (1897), W. I. Bartholomew, Putnam; seventeenth, eighteenth (1898, 1899), F. H. Stadtmueller, Elmwood. Unbound.

New York. — Annual report of the New York state dairymen's association: first (1877), Josiah Shull. Ilion. Pamphlet.

Annual report of the New York state cheese manufacturers' association: second (1864), W. H. Comstock. Utica. Pamphlet.

New Jersey. — Report of the dairy commissioner of the state of New Jersey: 1891-94, 1896, 1898, Geo. W. McGuire. Trenton. 5 vols.

1886, William K. Newton, Paterson; 1891, Geo. W. McGuire, Trenton. Pamphlets.

---

* July 1, 1895, consolidated as bureau of milk inspection (board of health).

North Carolina. — Annual report of the North Carolina state dairymen's association: first (1896), Frank E. Emery. West Raleigh. Pamphlet.

Georgia. — Annual meeting of the Georgia dairymen's association: 1898, M. L. Duggan. Macon. Pamphlet.

Ohio. — Annual report of the Ohio dairy and food commissioner: eleventh (1897), F. B. McNeal; twelfth (1898), J. E. Blackburn. Columbus. 2 vols.

Michigan. — Annual report of the dairy and food commissioner of the state of Michigan: second (1894), C. E. Storrs; fourth (1896), Elliot O. Grosvenor. Lansing. 2 vols.

Bulletin Nos. 39, 43. Pamphlets.

Wisconsin. — Annual report of the state dairy and food commissioner of Wisconsin: first (1890), H. C. Thom; "Biennial," 1892, D. L. Harkness; 1894, Thos. Luchsinger. Madison. 3 vols.

Annual report of the Wisconsin dairymen's association: twentieth (1892), D. W. Curtis; twenty-fifth, twenty-sixth (1897, 1898), Geo. W. Burchard. Fort Atkinson. 3 vols.

Minnesota. — Biennial report of the Minnesota state dairy and food commissioner: second, third (1888, 1890), Warren J. Ives, St. Paul; fourth (1892), A. K. Finseth, Minneapolis; seventh (1898), Berndt Anderson, St. Paul. 4 vols.

North Dakota. — Annual meeting of the North Dakota state dairymen's association: first (1891), E. F. Ladd, Fargo; third (1897), H. U. Thomas, Bismarck. Pamphlets.

Iowa. — Annual report of the state dairy commissioner: tenth, eleventh (1896, 1897), W. K. Boardman. Des Moines. 2 vols.

Twelfth report (1898), B. P. Norton. Pamphlet.

Nebraska — Annual report of the Nebraska dairymen's association: 1896, S. C. Bassett. Gibbon. 1 vol.

California. — Report of the state dairy bureau: second (1896–98), William Vanderbilt. San Francisco. Pamphlet.

Washington. — Biennial report of the state dairy commissioner of Washington: second (1897–98), E. A. McDonald. Seattle. Pamphlet.

United States. — Annual report of the American dairymen's association: second-fourth (1866–68),* Gardner B. Weeks, Verona, N. Y.; eighth, thirteenth (1872, 1877), L. B. Arnold, Rochester, N. Y. Unbound.

Canada. — Annual report of the dairy commissioner for the Dominion of Canada: first-third (1890–93), Jas. W. Robertson. Ottawa. 3 vols.

Report of the commissioner of agriculture and dairying for the Dominion of Canada: 1897, Jas. W. Robertson. 1 vol.

New Brunswick. — Annual report of the farmers' and dairymen's association of New Brunswick: 1894–95, W. W. Hubbard. Fredericton. Pamphlet.

Quebec. — Report of the dairymen's association of the Province of Quebec: fifteenth (1896), Emile Castel. St. Hyacinthe. Pamphlet.

---

* Includes annual report Ohio dairymen's association: 1866–68.

Manitoba. — Annual report of the Manitoba dairy association: eleventh (1897), E. Cora Hind. Winnipeg. Pamphlet.

Ontario. — Annual reports of the butter and cheese associations of the Province of Ontario: 1897. Pamphlet.

Sample copy, "The creamery journal," published at Waterloo, Iowa.

CLASS I., SECTION 7. — PRODUCE EXCHANGES, ETC., REPORTS.

Massachusetts. — Annual report of the Boston chamber of commerce: sixth, eighth-thirteenth (1891, 1893-98). Boston. 7 vols. Second-fifth (1887-90). Unbound.

New York. — Report of the New York produce exchange: 1886-98, New York. 12 vols.

CLASS I., SECTION 8. — AGRICULTURAL JOURNALS, ETC.

1819. The American farmer, containing original essays and selections on agriculture, horticulture, rural economy and internal improvements. Third edition. Vols. I.-III., V.-XI. (1819-22, 1823-30), John S. Skinner; vols. XII.-XV. (1830-34), Gideon B. Smith. New series. Vols. VII., VIII. (1878, 1879), Saml. Sands & Son. Baltimore, Md. 16 vols.

1820. Agricultural intelligencer and mechanics register.* Vol. I. January-July, 1820. William S. Spear. Boston. 1 vol.

1822. The New England farmer, containing essays, original and selected, relating to agriculture and domestic economy: vols. I.-V. (1822-27). The New England farmer and horticultural journal: vols. VI.-XII. (1827-34). The New England farmer and gardener's journal: vols XIII.-XV. (1834-37), Thomas G. Fessenden; vol XVI. (1837-38), Thomas G. Fessenden and Henry Colman. The New England farmer and horticultural register: vols. XVII., XVIII. (1838-40), Henry Colman; XIX.-XXI. (1840-43), Allen Putnam; XXII.-XXIV. (1843-46), Joseph Breck. Boston. 24 vols.

1828. The New-England farmers' and mechanics' journal. Vol. I., 1828. E Holmes, M.D. Gardiner, Me. 1 vol.

The Quarterly journal of agriculture. Vols. I.-XIII. (1828-43). Edinburgh and London. 13 vols.

1834. The Cultivator, a monthly publication, designed to improve the soil and the mind. Vols. I. VI. (1834-39), J. Buel. Albany. 3 vols.

1836. The Farmers' cabinet; devoted to agriculture, horticulture and rural economy. Vols. I.-IV. (1836-40). The Farmers' cabinet; vols. V.-XII. (1840-48), Moore & Waterhouse, Kimber & Sharpless, Josiah Tatem. Philadelphia. 12 vols.

1839. The Farmers' monthly visitor; intended to promote the interests of the farmer, to defend the dignity of the agricultural profession

* Supposed to be the first agricultural weekly newspaper published in Massachusetts.

and encourage the practice of domestic economy. Vols. I.-XI. (1839-49), Isaac Hill. Concord, N. H. 5 vols.

1840. The Cultivator, a consolidation of Buel's Cultivator and Genesee farmer, designed to improve the soil and the mind, etc. Vols. VII.-X. (1840-43), (Cultivator and farmer, vols. I.-IV.). Willis Gaylord and Luther Tucker. Albany, N. Y. 4 vols.

The Yankee farmer, and New England cultivator, containing essays, original and selected, relating to agriculture, economy and useful arts. Vols. VI., VII. (1840, 1841), S. W. Cole. Boston. 2 vols.

1842. The American agriculturist; designed to improve the planter, the farmer, the stock breeder and the horticulturist. Vols. I.-X. (1842-51), A. B. & R. L Allen. New York city. 5 vols.

1843. The Prairie farmer. Late the Union agriculturist and Western prairie farmer, devoted to western agriculture, mechanics and education. Vols. III., IV. (1843, 1844), J. S. Wright and J. A. Wight. Chicago. 1 vol.

1844. The Cultivator, a monthly journal, devoted to agriculture, horticulture and to domestic and rural economy. New series. Vols. I.-IX. (1844-52). The Cultivator, a monthly journal for the farm and the garden, devoted to agricultural and rural improvement, and designed to improve the soil and the mind. Third series. Vols. I.-IV. (1853-58), Luther Tucker. Albany, N. Y. 15 vols.

1845. Farmers' library and monthly journal of agriculture. Vols. I., II. (1845-48), John S. Skinner. New York. 2 vols.

1846. The Genesee farmer: a monthly journal devoted to agriculture and horticulture, domestic and rural economy. Vols. VII., VIII. (1846, 1847), Daniel Lee, M. D.; vols. IX., X. (1848, 1849), Daniel Lee and D. D. T. Moore; XI.-XIV. (1850-53), Daniel Lee and James Vick, Jr.; XV., XVI. (1854, 1855), Daniel Lee. Rochester, N. Y. 9 vols.

1847. The Gardeners' chronicle and agricultural gazette, a stamped newspaper of rural economy and general news. 1847-55. London, Eng. 9 vols.

1848. The Boston cultivator, a family newspaper, etc. Vol. X. (1848), Otis Brewer. Boston. 1 vol.

The Plough, the loom and the anvil. Farmer and mechanic. Vols. I.-VII, IX. (1848-54, 1857), J. S. Skinner & Son, F. G. Skinner and Myron Finch. Philadelphia and New York. 8 vols.

1849. The Working farmer. Devoted to agriculture, embracing the rights of agriculturists, etc. Vols. I.-VII. (1849-56), James J. Mapes. New York. 2 vols.

1850. The New England farmer; a semi-monthly journal, devoted to agriculture, horticulture and their kindred arts and sciences. Vol. II. (1850), S W. Cole; III. (1851), S. W. Cole and Simon Brown; IV.*-XI. (1852-59), Simon Brown. New series. Vol. I. (1867), Simon Brown and Stilman Fletcher. Boston. 11 vols.

1851. The Journal of agriculture. Vols. I.-IV. (1851-54), William S. King and J. J. Mapes. Boston. 2 vols.

---

* Changed to monthly.

1852. The Illustrated New England cultivator, a monthly journal devoted to agriculture, horticulture, mechanics and rural and domestic economy. Vol. I. (1852), R. B. Fitts & Co. Boston. 1 vol.

1853. The Country gentleman, a journal for the farm, the garden and the fireside, etc. Vols. I.-VI. (1853-55), Luther Tucker and John J. Thomas. Albany, N. Y. 4 vols.

Journal D'Agriculture Pratique. M. Barral. Troisème Série. Tome VI., Janvier a Juin 1853; Quatrième Série. Tome VII., Janvier a Juin 1857. Paris. 2 vols. Ill.

1854. Centralblatt des landwirthschaftlichen Vereins in Bayern. Forty-fourth and forty-eighth years, 1854, 1858. München. 2 vols.

1855. The Homestead; a weekly journal for the farmer, gardener and fruit grower, the manufacturer and mechanic, etc. Vols. I., II. (1855-57), William Clift, Theodore S. Gold, Henry A. Dyer and Mason C. Weld. Hartford, Conn. 2 vols.

The New England farmer, a monthly agricultural journal for the farm and garden. Vols. VII., VIII., X., XII., XIV. (1855-62), Simon Brown. Boston. Unbound, some volumes incomplete.

1856. The Valley farmer, a monthly agricultural journal, designed to benefit the planter, farmer, gardener, fruit grower and stock raiser. Vol. VII. (1856), N. J. Colman and H. P. Bryam. St. Louis, Mo., and Louisville, Ky. 1 vol.

The Farmer's magazine and monthly journal of the agricultural interest. Dedicated to the farmers of the United Kingdom. Third series. Vols. IX.-XVI., XXVIII.-LVII. (1856-59, 1865-80). London, Eng. Unbound, some volumes incomplete. Vol. XI. (1857), bound.

1858. The Prairie farmer. A weekly journal devoted to agriculture, horticulture, mechanics, education, etc. New series. Vols. 2, 4-6, 8-10 (1858-62). Emery & Co. Chicago. 7 vols.

Beitschrift fur die landwirthschaftlichen Vereine des Grotsherzogthums Hessen. 1858, 1862. Dr. C. Zeller. Darmstadt. 2 vols.

1883. Zeitschrift des landwirthschaftlichen Vereins in Bayern, etc. Vols. LXXIII., LXXV.-LXXXV. (1883, 1885-95), Otto May. München. 12 vols.

1887. Agricultural science: vols. I.-V. (1887-91), Charles S. Plumb, Geneva, N. Y., Knoxville, Tenn., and LaFayette, Ind.; VI.-VIII. (1892-94), William Frear, State College, Pa. 8 vols.

1888. The Breeder's gazette, a weekly journal for the stock breeder, the turfman, the dairyman and the general farmer. Vols XIII.-XVIII. (1888-90); Journal of live stock husbandry, vols. XIX.-XXVI. (1891-94); Journal for farmers and stock growers, vols. XXVII.-XXX. (1895, 1896); Journal for the American stock farm, vols. XXXI.-XXXIV. (1897, 1898), Sanders Publishing Company. Chicago. Unbound.

The Cultivator and country gentleman, for the farm, the garden and the fireside. (A consolidation of the Genesee farmer, 1831-39, and the Cultivator, 1834-65). Vols. LIII.-LXIII. (1888-98), Luther Tucker & Son. Albany, N. Y. Unbound.

1890. The Agricultural gazette of New South Wales. Vols. I.-IX. (1890-98). Department of agriculture. Sydney, N. S. W. 9 vols.

1891. Hoard's Dairyman, devoted to dairying and dairy stock interests. Vols. XXI.-XXVIII. (1891-98), W. D. Hoard Company. Fort Atkinson, Wis. Unbound.

1892. West Virginia farm bulletin. Vol. 1 (1892). West Virginia farm reporter. Vols. 2-5 (1893-97). The West Virginia farm review, a monthly journal for West Virginia farmers. Vol. 6 (1898). Charleston. Unbound. Vols. 1, 2 and 3 incomplete. Issued by the West Virginia state board of agriculture.

The Colonia: the Colonial college magazine. Vol. 2, Nos. 1-5 (April. 1892-Aug., 1893). Hollesley Bay, Eng. Unbound.

1896. Vierteljahreschrift des Bayerischen landwirthschaftsrathes. Vols. I.-III. (1896-98), Otto May. München. 3 vols.

Wochenblatt des landwirthschaftlichen Vereins in Bayern. Eighty-sixth-eighty-eighth years (1896-98). München. 3 vols.

1897. The Agricultural epitomist. 16th year. Epitomist Publishing Company. Indianapolis, Ind. Unbound.

The American cultivator, an illustrated weekly journal of agriculture. horticulture and family miscellany. Vols. LIX., LX. (1897, 1898), George B. James. Boston. Unbound.

The New England homestead. Eastern edition of American agriculturist. Vols 34-37 (1897, 1898). Springfield, Mass. Unbound.

1898. The Sugar beet. Devoted to the cultivation and utilization of the sugar beet. Nineteenth year (1898). Lewis S. Ware. Philadelphia, Pa. Unbound.

Southern farm magazine (formerly Southern states farm magazine), Vol. VI. (1898). Baltimore, Md Unbound.

Farming, an illustrated weekly journal devoted to farming and the farmer's interest. Vol. XV., Nos. 26-52; Vol. XVI., Nos. 1-17. Toronto, Can. Unbound.

The library also contains specimen copies of the Maine farmer, Massachusetts ploughman, New England farmer, the Connecticut farmer, the Milk reporter, Farm and fireside, Farmer's home, Farm news, Southern stock farm, the Chicago hay journal, the Farmers' voice, Texas farm ranch, St. Paul dairy reporter, the American farmer, Canadian live stock and farm journal, the Agricultural times and monthly review of agricultural and dairy education, the Rural New-Yorker, the National stockman and farmer, the Sorgo journal and farm machinist, the Farm implement news.

Class II., Section 1.—Agriculture, Theory and Practice.

1635. The Booke of the English husbandman. G. Markham. 323 pp. Ill. This volume contains also 54 pages on "The pleasures of princes, or, Good mens recreations." London.

1716 (?). The art of husbandry; or the way of improving of land. J. Mortimer. 632 pp. London.

1757. Observations in husbandry. Edward Lisle. 450 pp. London.

1764. Museum Rusticum et Commerciale: or, select papers on agriculture, commerce, arts and manufactures. 6 vols. London.

1772. Ellis's husbandry, abridged and methodized: comprehending the most useful articles of practical agriculture. William Ellis. 2 vols. 1,044 pp. London.

1775. Agriculture delineated: or, the farmer's complete guide; being a treatise on lands in general, etc. Gustavus Harrison. 414 pp. London.

1780. Practical husbandry; or, the art of farming, with a certainty of gain, etc. John Trusler. 164 pp. London.

1788. The Husbandry of the ancients. Adam Dickson. 2 vols. 1,021 pp. Edinburgh and London.

1797. Rectified report of Berwickshire agriculture, digested from the communications of the county. John Home. 188 pp., map. Berwick. Contains also Directions for preparing manure from peat. 50 pp. Edinburgh. 1815; Some instructions for foresters, 98 pp.; also miscellaneous communications, 120 pp.

Essays relating to agriculture and rural affairs. James Anderson. 368 pp. Dublin.

1799. Essays and notes on husbandry and rural affairs. J. B. Bordley. 591 pp. 4 plates. Philadelphia.

1800. Phytologia; or the philosophy of agriculture and gardening, etc. Erasmus Darwin. 612 pp. Ill. London.

1804. Communications to the board of agriculture; on subjects relative to the husbandry, and internal improvement of the country. Second edition. 1804–13. 7 vols. Ill. London.

1811. A treatise on agriculture and rural affairs. Robert Brown. 2 vols. 936 pp. Edinburgh and London.

1816. Improved agriculture, and the suppression of smuggling, property-tax and poor's-rates, etc. F. Vanderstraeten. 296 pp. London. Also contains a treatise on soils and manures, as founded on actual experience, etc. By a practical agriculturist. 176 pp. London. 1818.

1818. Arator, being a series of agricultural essays, practical and political, in sixty-four numbers. John Taylor. Fourth edition, revised and enlarged. 239 pp. Petersburg, Va.

1819. The farmer's manual; being a plain practical treatise on the art of husbandry, etc. Frederick Butler. 224 pp. Hartford.

Italy, its agriculture, etc. From the French of Mons. Chateauvieux, being letters written by him in Italy, in the years 1812 and 1813. Translated by Edward Rigby. 358 pp. Norwich and London.

1820. A new system of cultivation, without lime, or dung, or summer fallows, as practiced at Knowle-Farm, in the county of Sussex. Alexander Beatson. 162 pp. Ill. London. Supplement. 59 pp. London. 1821.

1821. A guide to farm book-keeping, founded upon actual practice and upon new and concise principles, etc. Innes Munro. 145 pp. Edinburgh.

The code of agriculture; including observations on gardens, orchards, woods and plantations. Sir John Sinclair. Third edition. 746 pp. Ill. London. 1821. Fifth edition. 711 pp. London. 1832.

1825. On the science of agriculture, etc. Joseph Hayward. 220 pp. London.

1833. The complete grazier; or, farmer's and cattle breeder's and dealer's assistant. By a Lincolnshire grazier. Sixth edition, revised, corrected and greatly improved. 622 pp. Ill. London, Dublin and New York.

1834. British husbandry; exhibiting the farming practice in various parts of the United Kingdom. 2 vols. Ill 1,151 pp. London. 1834-37. The second volume contains also 151 pp. on Useful and ornamental planting. London. 1832.

1835. The complete farmer and rural economist; containing a compendious epitome of the most important branches of agriculture and rural economy. Thomas G. Fessenden. Second edition, revised, improved and enlarged. 372 pp. Ill. Boston, New York, Philadelphia and Rochester, N. Y.

1837. Maison Rustique du XIXe siècle. Encyclopédie d'agriculture pratique, etc., sous la direction de M. Malepeyre aîné. Tome Second: Cultures industrielles et animaux domestiques. 560 pp. Ill. Paris. 1837. Tome Troisième: Arts agricoles. 480 pp Ill. Paris. 1839. Tome Quatrième: Agriculture Forestière, Législation et Administration Rurale. 552 pp. Ill. Paris. 1839. 3 vols.

1838. System of agriculture. From the encyclopædia Britannica, seventh edition. James Cleghorn. 251-356 pp. Thirteen engravings. Edinburgh, London and Dublin.

1840. Outlines of a new plan for tilling and fertilizing land. Thomas Vaux. 214 pp. Ill. London.

Practical farming and grazing; with observations on the breeding and feeding of sheep and cattle, etc. C. Hillyard. Third edition. 165 pp. Northampton, Eng.

1842. Die Königlich Württembergische Lehranstalt für land-und forstwirthschaft in Hohenheim. 332 pp. Ill. Stuttgart.

1844. Cours d'Agriculture. Par Le Comte De Gasparin. 2 vols. 1,257 pp. Ill. Paris. 1844-46.

Elements of practical agriculture, etc. John Sproule. Third edition. Ill. 710 pp. London.

The principles of agriculture. Albert D. Thäer. Translated by William Shaw and Cuthbert W Johnson. 2 vols. 1,376 pp. London.

1846. Industry of the Rhine. Series I. Agriculture: embracing a view of the social condition of the rural population of that district. T. C. Banfield. 244 pp. London.

Création de la ferme et des bois de Bruté sur un terrain de landes, a Belle-Isle-En-Mer (Morbihan). Par J.-L. Trochu. 426 pp. Paris.

Des Systèmes de Culture et de leur influence sur l'économie sociale. Par M. H. Passy. 177 pp. Paris. 1846. This volume also contains "Reboisement des Montagnes." Par M. Z. Jouyne. 169 pp. Digne, France. 1850.

Natural history of New York. Part V. Agriculture. Ebenezer Emmons. 3 vols. 1846, 1849, 1851. 1,104 pp. Ill. Plates. Albany.

The farmer's library. Vol. I. (1846). Lectures to farmers on agricultural chemistry. Alexander Petzholdt. 107 pp. The principles of agriculture. Albert D. Thäer. Translated by William Shaw, and Cuthbert W. Johnson. 551 pp. New York. 1846. Vol. II. (1847). The book of the farm: detailing the labors of the farmer, steward, plowman, hedger, cattle-man, shepherd, field-worker and dairymaid. Henry Stephens. 569 pp. Ill. New York. 1847. Vol. III. (1848). Vol. II. of The book of the farm. 479 pp. Ill. This third volume also contains papers on manures, the nutrition of plants, and the action of salt upon vegetation. 40 pp. New York. 1848. 3 vols.

1847. Elements of practical agriculture; comprehending the cultivation of plants, the husbandry of the domestic animals and the economy of the farm. David Low. Fifth edition. 811 pp. Ill. London and Edinburgh.

1848. Some of the five hundred points of good husbandry, and the book of huswifery. Thomas Tusser (1558). Newly corrected and edited by H. M W. 161 pp. Oxford and London.

1849. The new husbandry, or, a complete code of modern agriculture, etc. Law. Rawstorne, Esquire. Second edition. 395 pp. London.

1850. Die Grundzuge de Landwirthschaft. Ein Lehrbuch fur den Selbstuntericht und zum Gebrauch in landwirthschaftlichen Lehranstalten. Nach dem cours élémentaire d'agriculture der Professoren Girardin und Du Breuil selbständig bearbeitet von Dr. Wilhelm Hamm. In zwei Bändun. Ill. Braunschweig. 1850, 1853.

1851. A cyclopædia of practical husbandry and rural affairs in general. Martin Doyle. A new edition, enlarged; and revised throughout by the Rev. W. Rham. 574 pp. Ill. London.

Baxter's library of practical agriculture, a work of reference to farming, breeding, grazing, dairy management, gardening and rural affairs. John Baxter. Fourth edition. 2 vols. 931 pp. Contains also a brief description of two models of improved farm yard and buildings. Lewes, Eng. 1851.

Elements of agriculture: for the use of primary and secondary schools. By L. Bentz, of France, and A. J. Chretien de Roville. Translated and adapted to the use of the rural primary schools of the United States of America by F. G. Skinner. 91 pp. New York.

European agriculture and rural economy. Henry Colman. Fourth edition, with additions. 2 vols. 1,080 pp. Ill. Boston.

An improved system of farm book-keeping, etc. By the author of "British husbandry." 104 pp. London.

Calendrier du Bon Cultivateur, ou manuel de l'agriculteur praticien; par Mathieu de Dombasle. New edition, considerably enlarged. 820 pp. Ill. Paris.

1852. The farmer's guide to scientific and practical agriculture. Henry Stephens and John P. Norton. 2 vols. 1,518 pp. Ill. New York.

Der Ackerban nach seinen monatlichen Berrichtungen, als Leitfaden für die landwirthschaftliche Praris von Freiherrn L. von Babo. 424 pp. Frankfurt a. M.

1854. Essays on agriculture. Thomas Gisborne. Third edition. 255 pp. Ill. London.

Talpa: or the chronicles of a clay farm. An agricultural fragment. C. W. H. With an introduction and notes by Lewis F. Allen. To which are added two prize essays on tile drainage. 294 pp. Ill. Buffalo, N. Y.

1855. The book of the farm, etc. Henry Stephens. Explanatory notes, remarks, etc. John S. Skinner. 2 vols. 1,088 pp. Ill. New York.

1856. Zeitschrift fur Deutsche landwirthe. Herausgegeben von Professor Ernst Stöckhardt. New series. 7th vol. 384 pp. Ill. Leipzig.

1857. The principles of agriculture, especially tropical, and of organic chemistry, familiarly treated. P. Lovell Phillips. 203 pp. London.

The elements of agriculture: a book for young farmers, with questions prepared for the use of schools. Geo. E. Waring, Jr. 288 pp. New York.

1858. Rural affairs: a practical and copiously illustrated register of rural economy and rural taste, etc. J. J. Thomas. Vol. I. 336 pp. Ill. Albany.

1859. Letters on modern agriculture. Baron von Liebig. Edited by John Blyth. 284 pp. London.

Prairie farming in America. With notes by the way on Canada and the United States. James Caird. 128 pp. Map. London.

A manual of scientific and practical agriculture, for the school and the farm. J L. Campbell. 442 pp. Ill. Philadelphia.

The progressive farmer: a scientific treatise on agricultural chemistry, the geology of agriculture, etc. J. A. Nash. 254 pp. New York.

1860 Farming as it is. An original treatise on agriculture, with the rights and duties of farmers. T. J. Pinkham. 393 pp. Boston.

Die Landwirthschaft in Bayern. Denkschrift zur feier des fünfzigjährigen Bestandes des landwirthschaftlichen Vereines in Bayern. 805 pp. München.

1861. Hand-book to the model farm, Glasnevin, and of agricultural education in Ireland. Thomas Baldwin. Second edition. 89 pp. Ill. Dublin, London, Edinburgh. Paper covers.

The agricultural instructor; or, young farmer's class-book. Edmund Murphy. Fourth edition. 114 pp. Dublin. Paper covers. 1861 (?).

1862. Manual of agriculture, for the school, the farm and the fireside. George B. Emerson and Charles L. Flint. 306. pp. Ill. Boston. New edition, revised by C. A. Goessmann. 284 pp. Ill. New York. 1885.

1863. The natural laws of husbandry. Justus von Liebig. Edited by John Blyth. 387 pp. New York.

My farm of Edgewood: a country book. D. G. Mitchell. 319 pp. New York.

Die Bewerbe in Grokherzogthum Baden. Ihre Statistik, ihre Pflege, ihre Erzengnisse. Dr. Rudolph Dietz. 785 pp. Karlsruhe.

1864. Ten acres enough: a practical experience, showing how a very small farm may be made to keep a very large family, etc. Edmund Morris. 255 pp. New York.

How to get a farm, and where to find one, etc. Edmund Morris. 345 pp. New York.

High farming without manure. Six lectures on agriculture, delivered at the experimental farm at Vincennes. M. George Ville. 112 pp. London. 1864 (?).

1865. Facts for farmers; also for the family circle, etc. Solon Robinson. 2 vols. 1,034 pp Ill. New York.

Science and practice in farm cultivation. James Buckman. 358 pp. Ill. London.

1866. The farmer's record and account book, etc. W. C. Munson. Chicago.

1868. How to make the farm pay; or, the farmer's book of practical information on agriculture, etc. Charles W. Dickerman, assisted by Charles L. Flint. 750 pp. Ill. Philadelphia, Cincinnati, Chicago and St. Louis.

1878. First principles of agriculture. Henry Tanner. 95 pp. London.

1879. Jack's education or how he learnt farming. Henry Tanner. 158 pp. London.

1881. Elementary lessons in the science of agricultural practice. Henry Tanner. 310 pp. London.

Farm echoes. F. Ratchford Starr. 110 pp. Ill. New York.

Journal of a farmer's daughter. Elaine Goodale. 183 pp. New York.

Footprints. Nature seen on its human side. Sarah Tytler. 289 pp. Ill. New York.

1884. The American farmer. A complete agricultural library, with useful facts for the household. Charles L Flint. 2 vols. 1,884 pp. Ill. Hartford.

How the farm pays. The experiences of forty years of successful farming and gardening. William Crozier and Peter Henderson. 400 pp. Ill. New York.

The farmer's calendar. Describing the work to be done on various kinds of farms during every month in the year. John Chalmers Morton. Sixth edition. Entirely revised, with additions. 700 pp. Ill. London. 1884 (?).

1885. Five acres too much. A truthful elucidation of the attractions of the country, etc. Robert Barnwell Roosevelt. New and enlarged edition. 309 pp. Ill. New York.

The new agriculture; or, the waters led captive. A. N. Cole. 223 pp. Ill. New York.

1887. The soil of the farm. Published by Orange Judd Company. 107 pp. New York.

1888. A B C of agriculture. Mason C. Weld and other writers. 66 pp. Ill. New York.

Play and profit in my garden. Rev. E. P. Roe. 349 pp. New York.

The Rothamsted experiments on the growth of wheat, barley, and the mixed herbage of grass land. William Fream. 235 pp. London.

Agriculture in some of its relations with chemistry. F. H. Storer. 2 vols. 1,039 pp. New York.

Homestead highways. Herbert Milton Sylvester. 302 pp. Boston.

1891. Elementary agriculture. A text-book. Henry J. Webb. 196 pp. Ill. London and New York.

The perplexed farmer. How is he to meet alien competition? Three lectures given at Brussels before the Belgian Royal Central Society of Agriculture by Georges Ville. Translated from the fourth French edition, with additional matter supplied by the author. William Crookes. 208 pp. London and New York.

1892. Elements of agriculture. A text-book. W. Fream. 450 pp. Ill. London.

First lessons in agriculture. F. A. Gulley. Second edition, revised and enlarged. 155 pp. New York.

A text-book of tropical agriculture. H. A. Alford Nicholls. 312 pp. Ill. London and New York.

1894. Bread from stones. A new and rational system of land fertilization and physical regeneration. Translated from the German. 135 pp. Philadelphia.

Wayside sketches. Eben J. Loomis. 188 pp. Boston.

1895. Agriculture. R. Hedger Wallace. 352 pp. Ill. Philadelphia.

1896. First principles of agriculture. Edward B. Voorhees. 212 pp. New York, Boston and Chicago.

1897. A great agricultural estate. Being the story of the origin and administration of Woburn and Thorney. By the Duke of Bedford. 256 pp. London.

The fertility of the land. A summary sketch of the relationship of farm-practice to the maintaining and increasing of the productivity of the soil. Isaac Phillips Roberts. 415 pp. Ill. New York and London.

1898. The principles of agriculture. A text-book for schools and rural societies. Edited by L. H. Bailey. 300 pp. Ill. New York and London.

Not dated. Bibliothèque du cultivateur publiée avec le concours de M. Le Ministre de L'Agriculture. Tome I. Manuel de L'Agriculteur Commençant. Par Schwerz traduit par Charles et Félix Villeroy. Seconde édition. 394 pp. Paris.

Tome III. Guide des Propriétaires de Biens Ruraux. Affermés par De Gasparin. Seconde édition. 383 pp. Paris. In this second volume is included "Guide des Propriétaires des Biens Soumis au Mètayage," par M. De Gasparin. Seconde édition. 162 pp. Paris.

Pamphlets.

A system for managing heavy and wet lands without summer fallows. Thomas Greg. Fourth edition. 48 pp. London. 1841.

On practical agriculture; or, an attempt to reduce the theory and practice to the comprehension of the operator. William Partridge. 42 pp. New York. 1849.

Agriculture in British Honduras, by Captain W. G. Stovall, an experienced American agriculturalist, being a practical treatise on the modes of cultivating corn and cotton in British Honduras. 37 pp. Belize, B. H. 1865.

Notes on northern farms and farming. John Wilson. 22 pp. Newcastle-upon-Tyne. 1864.

Our farm of two acres. Harriet Martineau. 48 pp. New York. 1865.

Agriculture in South Australia. By the special reporter of The leader. 59 pp. Melbourne and Adelaide. 1874.

The farmer's scientific manual. Thomas P. Janes. 168 pp. Ill. Atlanta, Ga. 1878.

The agriculture of Japan. William S. Clark. 26 pp. Boston. 1879.

An essay on the transfer of land by registration. Sir Robert Torrens. 88 pp. London, Paris, New York and Melbourne.

The progress of agriculture. Being the agricultural section of Philip's "History of progress in Great Britain." 65–136 pp. Ill. London.

The complete English farmer: or, husbandry made perfectly easy, in all its useful branches. George Cooke. 142 pp. London and Boston.

Class II., Section 2.—Manures and Fertilizers.

1825. Testimonies in favor of salt as a manure, and a condiment for horse, cow and sheep. Rev. B. Dacre. 288 pp. Manchester, Eng. This volume also includes "A dissertation on the nature of soils, and the properties of manure," etc. 176 pp. London. 1833.

1843. A muck manual for farmers. Samuel L. Dana. 232 pp. Second edition, with additions. Lowell, Mass. 1843. Also fourth edition. 312 pp. New York. 1856.

1844. The economy of waste manures, a treatise on the nature and use of neglected fertilizers. John Hannam. 114 pp. London.

1846. A treatise on manures, their nature, preparation and application, with a description and use of the most approved British grasses, to which is added a miscellaneous article on farming. John Donaldson. 416 pp. Ill. London.

The muck manual: for the use of farmers. Frederick Falkner. A new edition. 306 pp. London.

1849. On the use of lime in agriculture. James F. W. Johnston. 259 pp. Ill. Edinburgh and London.

1851. A practical treatise on manures. From the recent publication of the British society for the diffusion of useful knowledge; with additional notes by the American author. 204 pp. E. S. Jones & Co. Philadelphia.

On the fertilizers. Cuthbert W. Johnson. Third edition. 480 pp. London.

1852. Rudimentary treatise on clay lands and loamy soils. Professor Donaldson. 140 pp. London.

1856. The field book of manures; or, the American muck book, etc. D. J. Browne. 422 pp. New York.

1872. The school of chemical manures; or elementary principles in the use of fertilizing agents. From the French of M. George Ville, by A. A. Fesquet. 116 pp. Philadelphia.

1882. On artificial manures, their chemical selection and scientific ap-

plication to agriculture. M. Georges Ville. Translated and edited by William Crookes. Second edition, thoroughly revised. 451 pp. Ill. London.

1888. Talk on manures. Joseph Harris. New and enlarged edition. 366 pp. New York.

1889. A treatise on manures, or, the philosophy of manuring. A. B. Griffiths. 399 pp. Ill. London and New York.

1894. The phosphates of America. Where and how they occur; how they are mined; and what they cost. Francis Wyatt. Fifth revised edition. 191 pp. Ill. New York and London.

1898. Fertilizers. The source, character and composition of natural, home-made and manufactured fertilizers; and suggestions as to their use for different crops and conditions. Edward B. Voorhees. 335 pp. New York and London.

Pamphlets.

The farmer's manual; a practical treatise on the nature and value of manures. F. Falkner. 153 pp. New York and Philadelphia. 1843.

Essay on guano. I. E. Teschemacher. 51 pp. Boston and New York. 1845.

A treatise upon the art of making manure. J. Howland Buttrick. 48 pp. New York and Springfield, Mass. 1846.

Reports on peat, muck and commercial manures, made to the Connecticut state agricultural society in 1857-58. Samuel W. Johnson. 174 pp. Hartford. 1859.

A word of advice to the farmer in selecting, analyzing and buying guano and artificial manures. Lonsdale Bradley. 55 pp. London and New York. 1859.

Guano. A treatise on the history, economy as a manure, and modes of applying Peruvian guano. Charles L. Flint. 48 pp. Boston. 1860.

Hearings in the case of Upton, Shaw & Co. upon the introduction of inodorous rendering and superphosphate apparatus. 114 pp. Boston. 1872.

Fertilizers. Where the materials come from, where to get them in the cheapest form, how to compound formulas. J. J. H. Gregory. 116 pp. Boston. 1886.

Essay on the use of nitrate of soda for manure, and the best mode of its employment. Joseph Harris. 96 pp. Copyright, 1890.

Sewage: application to land the best method of treatment. Henry J. Barnes. 22 pp. Boston. 1891.

Experimental work conducted at the Rhode Island experiment station with the nitrate of soda, or Chile salt-peter, as a fertilizer upon acid soils. Charles O. Flagg. 67 pp. Ill. New York. 1898.

The Bommer method for making manure. George Bommer. Revised and improved by H. H. Sherman. 90 pp. New York.

Miscellaneous essays, reports, etc., on manures and fertilizers: G. E. Day, S. L. Dana, Joseph Reynolds, Stephen L. Goodale, James R. Nichols, William H. Bowker, S. P. Sharples, Henry F. French,

Charles U. Shepard, William D. Northend, Peter Collier, W. O. Atwater, E. Lewis Sturtevant, C. A. Goessmann, W. H. Jordan, Paul Wagner, A. de Ghequier. 1 vol.

The American fertilizer: a monthly magazine, devoted to phosphate mining, fertilizer manufacturing, tankage, nitrates and auxiliary branches. Vols. I.-IX. (1894-98). Philadelphia. Unbound.

Class II., Section 3.—Drainage and Irrigation.

1806. Observations on the utility, form and management of water meadows, and the draining and irrigating of peat bogs, etc. William Smith. 121 pp. Ill. Norwich, Eng.

1817. A treatise on irrigation, or the watering of land. With some observations on cattle, tillage and planting. John Browne. 88 pp. Ill. London.

1834. The practical irrigator and drainer. George Stephens. 195 pp. Ill. Edinburgh and London.

1841. The mode of draining land, according to the system practised by the late Mr. Joseph Elkington. John Johnstone. A new edition. Ill. 118 pp. London.

1845. Practical hints on land draining, etc. Charles Newman. 64 pp. Ill. London.

1849. Rudimentary treatise on the drainage of districts and lands. G. Drysdale Dempsey. 142 pp. Ill. London.

1851. Irrigation et assainissement des terres Traité de l'emploi des eaux en agriculture. Raphael Pareto. Three parts. 1,106 pp. Paris.

1856. The practical land drainer. A treatise on draining land, etc. B. Munn. 190 pp. Ill. New York.

1859. Farm drainage. The principles, processes and effects of draining land, etc. Henry F. French. 384 pp. Ill. New York.

1867. Draining for profit, and draining for health. Geo. E. Waring, Jr. 244 pp. Ill. New York.

1885. First progress report of the Royal commission on water supply: 1884. Irrigation in Western America, so far as it has relation to the circumstances of Victoria. By the Hon. A. Deakin, M.P. 175 pp. Melbourne.

The complete text-book of farm engineering, comprising practical treatises on: I. Draining and embanking. 134 pp. Ill. II. Irrigation and water-supply. 149 pp. Ill. III. Farm roads, fences and gates. 123 pp. Ill. IV. Farm buildings. 167 pp. Ill. V. Barn implements and machines. 199 pp. Ill. VI. Field implements and machines. 181 pp. Ill. VII. Agricultural surveying. 128 pp. Ill. John Scott. London.

1886. Report of a commission appointed to consider a general system of drainage for the valleys of the Mystic, Blackstone and Charles rivers, Massachusetts. 243 pp. Ill. Boston.

Irrigation for the farm, garden and orchard. Henry Stewart. 276 pp. Ill. New York.

1888. The principles and practice of land drainage. John H. Klippart. Third edition. 454 pp. Ill. Cincinnati.

1891. Tile drainage, or why, where and how to drain land with tiles. W. I. Chamberlain. 148 pp. Ill. Medina, O.

1893. Land draining. A handbook for farmers on the principles and practice of farm draining. Manly Miles. 199 pp. Ill. New York

Pamphlet.

An address to the nobility, gentry, farmers and all persons interested in agriculture, on the subject of under-draining wet and cold land, by a plough, invented by Robert Green, a farmer. 49 pp. Ill. London. 1832.

CLASS II., SECTION 4.—FARM IMPLEMENTS, MACHINERY, BUILDINGS.

1802. A treatise on ploughs and wheel carriages. James Small. To which is annexed Arbuthnot's instructions on the formation of ploughs. 136 pp. 7 plates. Dublin.

1808. The plough-wright's assistant; or, a practical treatise on various implements employed in agriculture. Andrew Gray. 220 pp. 16 plates. Edinburgh.

1827. Cours de culture et de naturalisation des végétaur. Par André Thoüin. 65 plates. Paris.

1843. The implements of agriculture. J. Allen Ransome. 276 pp. Ill. London.

1851. Rudimentary treatise on well-digging, boring and pump-work. John Geo Swindell. Second edition, revised by G. R. Burnell. 107 pp. Ill. London.

1852. Rudimentary treatise on agricultural engineering. G. H Andrews. Vol. I., Buildings. 148 pp. Ill. Vol. II., Motive powers and machinery of the steading. 152 pp. Ill. Vol. III., Field machines and implements. 132 pp. Ill. London. 1852–53. 3 vols.

Field trials of agricultural implements. At Geneva, 1852; Syracuse, 1857; and at Utica, 1867. 1 vol. Ill.

1854. Rudiments of the art of building. Edward Dobson. Second edition. 154 pp. Ill. London.

1855. Farm implements, and the principles of their construction and use; an elementary and familiar treatise on mechanics. John J. Thomas. 267 pp. Ill. New York.

1858. The Farmer's and mechanic's practical architect; and guide in rural economy. J. H. Hammond. 224 pp. 24 designs. Boston and Cleveland, O.

1870. Stables, outbuilding and fences. Geo. E. Harney. 62 plates. New York.

1882. Farm homes in-doors and out-doors. E. H. Leland. 216 pp. Ill. New York.

1884. Household conveniences. Being the experience of many practical writers. 240 pp. Ill. New York.

Farm conveniences. A practical hand-book for the farm. 240 pp. Ill. New York.

1886. Barn plans and outbuildings. 235 pp. Ill. New York.

1887. Fences, gates and bridges. A practical manual. Edited by George A. Martin. 188 pp. Ill. New York.

Class II., Section 5.—Field Crops.

Alfalfa or Lucern.

1894. Alfalfa or lucern, its history, characteristics, cultivation, worth and uses. F. D. Coburn. 230 pp. Ill. Topeka, Kan.

Beet (Sugar).

1837. Notice on the beet sugar: translated from the works of Dubrunfaut, De Domballe and others. Edward Church. 54 pp. Northampton, Mass.

1867. Beet-root sugar and cultivation of the beet. E. B. Grant. 158 pp Boston.

1898. Sugar beet seed. A work for farmers, seedsmen and chemists, containing historical, botanical and theoretical data, combined with practical directions for the production of superior sugar beet seed. Lewis S Ware. 264 pp. Ill. Chicago, New York and Springfield, Mass.

Sugar: a new and profitable industry in the United States, etc. Herbert Myrick. 148 pp. Ill. New York and Chicago. 1897. Pamphlet.

Carrot.

Carrots, mangold wurtzels and sugar beets. How to raise them, how to keep them and how to feed them. James J. H. Gregory. 61 pp. Ill. Marblehead, Mass. 1882. Pamphlet.

Celery.

1860. How to cultivate and preserve celery. Theophilus Roessle. Edited, with a preface, by Henry S. Olcott. 100 pp. Ill. Albany and New York.

Clover.

1892. Clover culture. Henry Wallace. 156 pp. Ill. Des Moines, Ia.

Coffee.

1865. A treatise on the nature and cultivation of coffee; with some remarks on the management and purchase of coffee estates. Arthur R. W. Lascelles. 71 pp. London.

Memoria sobre el cultivo del cafeto. Por Nicolas Saenz. 65 pp. Bogota, Colombia. 1892. Pamphlet.

Corn (Broom).

1887. Broom-corn and brooms. A treatise on raising broom-corn and making brooms on a small or large scale. New and revised edition. 59 pp. Ill. New York.

Corn (Indian).

1828. A treatise on Cobbett's corn. William Cobbett. Ill. London. Unpaged.

1836. Histoire naturelle, agricole et économique du Maïs. Par Matthieu Bonafous. 181 pp. Ill. Paris and Turin.

Experiments with Indian corn. 1880-81. Manly Miles. Houghton farm. Includes "The Rothamsted experiments," by J. B. Lawes. 75 pp. Ill. Cambridge, Mass. 1882. Pamphlet.

American Indian corn as a cheap, wholesome and nutritious human food, etc. Charles J. Murphy. 96 pp. 1890. Pamphlet.

Cotton.

A memoir on the origin, cultivation and uses of cotton, etc. Whitemarsh B. Seabrook. 62 pp. Charleston, S. C. 1844. Pamphlet.

Ensilage (Silos).

1881. Silos and ensilage. The preservation of fodder corn and other green fodder crops. George Thurber. 69 pp. Ill. New York. New and enlarged edition. 93 pp. Ill. New York. 1886.

The book of ensilage; or, the new dispensation for farmers. John M. Bailey. Farmers' edition. 140 pp. Ill. New York.

1882. Report of proceedings of the ensilage congresses held in New York in 1882-86. 260 pp. Ill.

1889. Colcord's system of preserving green forage without heat or fermentation by the use of the silo governor. Samuel M. Colcord. 160 pp. Ill. Chicago.

Silos, ensilage and silage. A practical treatise on the ensilage of fodder corn. Manly Miles. 100 pp. Ill. New York.

The theory and practice of sweet ensilage. George Fry. 66 pp. London. Pamphlet.

Experiments with ensilage, made by the farm department of the Michigan state agricultural college, 1881-83. Sam'l Johnson. 23 pp. Lansing. 1886. Pamphlet.

Flax.

1846. On the cultivation of flax; the fattening of cattle with native produce; box-feeding; and summer-grazing. John Warnes. 321 pp. Ill. London. Second edition 362 pp. Ill. London. 1847.

Lecture on flax: its treatment, agricultural and technical. John Wilson. 52 pp. Ill. New York. 1853. Pamphlet.

An essay on the cultivation and curing of flax and hemp in Missouri. S. A. Clemens. 39 pp. Jefferson City. 1868. Pamphlet.

Annual report of the flax extension association, for the improvement of the culture of flax in Ireland: third, fourth (1869, 1870). Belfast.

Instructions for the culture and preparation of flax in Ireland. Michael Andrews, Jun. Fourth issue, revised. 29 pp. Ill. Belfast. 1870. Pamphlet.

Manual of flax culture; by practical flax growers in the United States, Ireland and Germany. 56 pp. Ill. New York. 1883 (?). Pamphlet.

Report presented to the Flax and hemp spinners' and growers' association. 29 pp. Boston 1885. Pamphlet.

Report on the history, culture and manufacture of flax and hemp in Kentucky. John R. Proctor. pp 101–172 of the "Geological survey of Kentucky." Ill. Frankfort. 1880. Pamphlet.

The cultivation of flax in the Connecticut valley. J. S. Davis. 26 pp. Holyoke, Mass. Pamphlet.

Grass.

1816. Hortus Gramineus Woburnensis: or, an account of the results of experiments on the produce and nutritive qualities of different grasses and other plants used as the food of the more valuable domestic animals: instituted by John, Duke of Bedford. George Sinclair. 382 pp. Ill. London. 1816. Edition 438 pp. Ill. London. 1824.

1824. Practical observations on the British grasses. William Curtis. Sixth edition, with considerable additions. John Lawrence. To which is subjoined a short account of the causes of the diseases in corn, called by farmers the blight, the mildew and the rust, by Sir Joseph Banks. 165 pp. Ill. London.

1857. A practical treatise on grasses and forage plants. Charles L. Flint. 236 pp. Ill. New York and London. Revised edition. 398 pp. Ill. Boston and New York. 1887.

1858. The natural history of British meadow and pasture grasses, with an account of their economy and agricultural indications. James Buckman. 73 pp. Ill. London and Cirencester, Eng.

1860. United States grasses. The species of the northern states, arranged according to the enumeration of those species in Gray's manual of the botany of the northern states. Chas J. Sprague and Charles L. Flint. 2 vols.

1885. The grasses of Maine. Designed for the use of the students of the Maine state college, and the farmers of the state. C. H. Fernald. 70 pp. 42 plates. Augusta. Unbound.

1896. Grasses of North America. W. J. Beal. Vol. 1. 457 pp. Ill. Lansing, Mich. 1887. Vol. II. 706 pp. Ill. New York. 1896.

1899. The grasses, sedges and rushes of the northern United States. Edward Knobel. 78 pp. 28 plates. Boston.

The British grasses and sedges. Anne Pratt. 136 pp. Ill. London. Not dated.

Muhlenberg's descriptive Graminum, etc. Plates. Vol. II. Explication des planches et des figures. 16 pp. 25 plates. Not dated.

Hop.

1838. The hop farmer; or, a complete account of hop culture, embracing its history, laws and uses, etc. E. J. Lance. 212 pp. Ill. London.

Hop culture; practical details, etc. 36 pp. Ill. New York. 1865 (?). Pamphlet.

Mate.

The Mate of Paraná. A. J. de Macedo Soares. 19 pp. Ill. Rio de Janeiro. 1875. Pamphlet.

Onion.

Onions, and how to raise them. James J. H. Gregory. 32 pp. Ill. Salem, Mass. 1865. Pamphlet.

Potato.

1847. The potato; its culture, uses and history. George W. Johnson. 181 pp. Ill. London and Winchester, Eng.

The potato plant, its uses and properties; together with the cause of the present malady. Alfred Smee. 157 pp. Ill. New York.

1893. The new potato culture. As developed by the trench system, etc. Elbert S. Carman. Second edition, revised and enlarged. 200 pp. Ill. New York.

Results of experiments at Rothamsted on the growth of potatoes, etc. J. H. Gilbert. 45 pp. Pamphlet.

Squash.

Squashes: how to grow them. A practical treatise on squash culture. James J. H. Gregory. 69 pp. Ill. New York. 1867 (?). Pamphlet.

Sugar Cane.

The Chinese sugar-cane; its history, mode of culture, manufacture of the sugar, etc. James F. C. Hyde. 106 pp. Boston and Cleveland, O. 1857. Pamphlet.

Tobacco.

1897. Tobacco leaf; its culture and cure, marketing and manufacture. J. B. Killebrew and Herbert Myrick. 508 pp. Ill. New York.

Tobacco culture; practical details, etc. Revised and enlarged edition. 50 pp. Ill. New York. 1884 (?). Pamphlet.

Wheat.

1860. The wheat plant: its origin, culture, growth, development, composition, varieties, diseases, etc., together with a few remarks on Indian corn, its culture, etc. John H. Klippart. 706 pp. Ill. Cincinnati, O.

1868. The American wheat culturist. A practical treatise on the culture of wheat, etc. S. Edwards Todd. 432 pp. Ill. New York.

The home and foreign agricultural miscellany. Vols. V. and VI. The culture of farm crops. Parts I. and II. Wheat. 186 pp. Ill. Edinburgh and London.

Wheat culture. How to double the yield and increase the profits. D. S. Curtiss. 72 pp. Ill. New York. 1882. Pamphlet.

Miscellaneous.

1839. Assolements et culture des plantes de L'Alsace, par J. N. Schwerz; ouvrage traduit de l'allemand et annote par Victor Rendu. 312 pp. Paris.

1847. The cultivated plants of the farm. The legumes, the grains and the esculents, etc. John Donaldson. 143 pp. London.

Culture des Plantes Économiques oléagineuses, textiles et tinctoriales, formant la quatriéme partie des préceptes d'agriculture pratique de J. N. Schwerz, revu par M. Pabst, traduit de l'allemand par M. N. Laverrière. Avec planches. 232 pp. Paris.

CLASS II., SECTION 6.—MARKET GARDENING, VEGETABLES, MUSHROOMS.

1782. Every man his own gardener. Being a new and much more complete gardener's kalendar than any one hitherto published. Thomas Mawe, John Abercrombie and other gardeners. The ninth edition, corrected, greatly enlarged and wholly new-improved. 574 pp. London. The twelfth edition. 616 pp. London. 1788.

1806. The American gardener's calendar; adapted to the climates and seasons of the United States. Containing a complete account of all the work necessary to be done in the kitchen garden, fruit garden, orchard, vineyard, nursery, etc. Bernard M'Mahon. 648 pp. Philadelphia.

1821. The American gardener; or, a treatise on the situation, soil, fencing and laying-out of gardens, etc. William Cobbett. Not paged. London.

1833. The new American gardener; containing practical directions on the culture of fruits and vegetables, etc. Thomas G. Fessenden. Seventh edition. 306 pp. Boston and Cincinnati.

Tenth edition. 307 pp. Boston. 1835.

1840. The young gardener's assistant; containing a catalogue of garden and flower seeds, with practical directions under each head for the cultivation of culinary vegetables and flowers, etc. Thomas Bridgeman. Eighth edition, improved. 408 pp. New York.

New edition, in three parts, with an appendix containing remarks on the alleged disease of the potato, etc. 517 pp. New York. 1857.

1847. The cucumber and the gooseberry; their culture, uses and history. George W. Johnson. pp. 1–101, the cucumber; pp. 103–180, the gooseberry. Ill. London and Winchester, Eng.

The auricula; its culture and history. George W. Johnson and J. Slater. pp. 1–90. The asparagus; its culture and history, by the same and Robert Errington. pp. 91–184. London, Winchester and Dublin.

1851. The vegetable cultivator: containing a plain and accurate description of all the different species and varieties of culinary vegetables, etc. John Rogers. A new edition. 343 pp. London.

The gardener's text-book: containing practical directions upon the formation and management of the kitchen garden; and for the culture and domestic use of its vegetables, fruits and medicinal herbs. Peter Adam Schenck. 299 pp. Ill. Boston.

1852 (?) The southern farmer and market gardener: being a compilation of useful articles on these subjects from the most approved

writers. Francis S. Holmes. New improved and enlarged edition. 249 pp. Ill. Charleston, S. C.

1855. The practical fruit, flower and vegetable gardener's companion, with a calendar. Patrick Neill. Adapted to the United States. From the fourth edition, revised and improved by the author. Edited by G. Emerson, with notes and additions by R. G. Pardee. 408 pp. Ill. New York.

1863. The field and garden vegetables of America; containing full descriptions of nearly eleven hundred species and varieties; with directions for propagation, culture and use. Fearing Burr, Jr. 674 pp. Ill. Boston.

1872. Farm-gardening and seed-growing. Francis Brill. 151 pp. New York.

New and enlarged edition. With suggestions to seed-growers by Dr. George Thurber. New York. 1886.

1884. Gardening for young and old. The cultivation of garden vegetables in the farm garden. Joseph Harris. 191 pp. Ill. New York.

Garden and farm topics. Peter Henderson. 244 pp. Ill. New York.

1887. Success in market gardening, and vegetable growers' manual. W. W. Rawson. 208 pp. Ill. Boston.

1888. Gardening for pleasure. A guide to the amateur in the fruit, vegetable and flower garden, with full directions for the greenhouse, conservatory and window garden. Peter Henderson. New, enlarged edition. 404 pp. Ill. New York.

Gardening for profit. A guide to the successful cultivation of the market and family garden. Entirely new and greatly enlarged. Peter Henderson. 376 pp. Ill. New York.

Truck-farming at the south. A guide to the raising of vegetables for northern markets. Dr. A. Oemler. New and revised edition. 274 pp. Ill. New York.

1893. Market gardening and farm notes. Experiences and observations in the garden and field, of interest to the amateur gardener, trucker and farmer. Burnet Landreth. 215 pp. New York.

1894. About mushrooms. A guide to the study of the esculent and poisonous fungi. Julius A. Palmer, Jr. 100 pp. Ill. Boston.

How to make the garden pay. T. Greiner. Second, revised and enlarged edition. 319 pp. Ill. Philadelphia.

1895. Our edible toadstools and mushrooms and how to distinguish them. W. Hamilton Gibson. 337 pp. Ill. New York.

1896. Vegetable gardening. A manual on the growing of vegetables for home use and marketing. Samuel B. Green. 224 pp. Ill. St. Paul and Delano, Minn.

Not dated. Mushroom culture; its extension and improvement. W. Robinson. 172 pp. Ill. New York.

Pamphlets.

Student's hand-book of mushrooms of America, edible and poisonous. Thomas Taylor. 24 pp. Ill. Washington, D. C. 1897.

Mushrooms and their use. Charles H. Peck. 80 pp. Ill. Cambridge, Mass. 1897.

CLASS II., SECTION 7. — GLASS HOUSES: CONSTRUCTION, MANAGEMENT, CROPS.

1796. A treatise on the culture of the pineapple and the management of the hot-house. Together with a description of every species of insect that infest hot-houses, with effectual methods of destroying them Wm. Speechly. The second edition, with additions. 211 pp. Ill. York, Eng.

1857. A practical treatise on the construction, heating and ventilation of hot-houses; including conservatories, greenhouses, graperies, etc. Robert B. Leuchars. 366 pp. Ill. New York.

1865 (?). Woodward's graperies and horticultural buildings. Geo. E. & F. W. Woodward. 139 pp. Ill. New York.

1866. Les plantes de serre. Traité théorique a pratique de la culture de toutes les plantes qui demandent un abri sous le climat de la Belgique, par M. E. De Puydt. 400 pp. Mons.

1874. Life under glass. Containing suggestions toward the formation of artificial climates. George A. Shove. 111 pp. Boston.

1894. Greenhouse construction. A complete manual on the building, heating, ventilating and arrangement of greenhouses, and the construction of hotbeds, frames and plant pits. L. R. Taft. 210 pp. Ill. New York.

1897. The forcing-book. A manual of the cultivation of vegetables in glass houses. L. H. Bailey. 266 pp. Ill. New York and London.

1898. Greenhouse management. A manual for florists and flower lovers on the forcing of flowers, vegetables and fruits in greenhouses, and the propagation and care of house plants. L. R. Taft. 382 pp. Ill. New York.

Greenhouse management for amateurs: descriptions of the best greenhouses and frames, etc. W. J. May. Second edition, revised and enlarged, and illustrated throughout. 379 pp. London. (Not dated, but recent.)

CLASS II., SECTION 8. — MILK, BUTTER, CHEESE.

1874. Milk-analysis. A practical treatise on the examination of milk and its derivatives, cream, butter and cheese. J. Alfred Wanklyn. 73 pp. Ill. New York.

1875 (?). Willard's practical butter book: a complete treatise on butter making at factories and farm dairies, etc. X. A. Willard. 171 pp. Ill. New York.

1895. Milk: its nature and composition. A hand-book on the chemistry and bacteriology of milk, butter and cheese. C. M. Aikman. 180 pp. Ill. London.

Infectiousness of milk. Result of investigations made for the trustees of the Massachusetts society for promoting agriculture. 141 pp. 17 plates. Boston.

1896. A new dairy industry. Preparation and sale of artificial mothers' milk, "normal infants' milk." James Fred. Sarg. 162 pp. Ill. Norfolk, Va.

1897. Testing milk and its products. A manual for dairy students, creamery and cheese factory operators and dairy farmers. E. H. Farrington and F. W. Woll. First edition. 236 pp. Ill. Madison, Wis.

Milk and its products. A treatise upon the nature and qualities of dairy milk and the manufacture of butter and cheese. Henry H. Wing. 280 pp. Ill. New York and London.

1898. Outlines of dairy bacteriology. A concise manual for the use of students in dairying. H. L. Russell. 192 pp. Ill. Madison, Wis.

Pamphlets.

Pasteurization and milk preservation, with a chapter on selling milk. J. H. Monrad. 72 pp. Ill. Winnetka, Ill.

Milk; its typical relations, etc. E. Lewis Sturtevant. 20 pp. South Framingham, Mass. 1874.

Results of inquiries conducted by the health department of the state board of health, lunacy and charity, relative to the quality of milk as produced in Massachusetts. 28 pp. Boston. 1886.

A plan to procure cow's milk designed for clinical purposes. Henry L. Coit. 12 pp. Newark, N. J. 1893.

CLASS II., SECTION 9.—BEES AND BEE KEEPING (APICULTURE).

1726. The true amazons: or, the monarchy of bees. Joseph Warder of Croydon, physician. The sixth edition. 112 pp. London.

1744. Melisshlogia; or, the female monarchy. Being an enquiry into the nature, order and government of bees Written upon forty years observations and experience. The Reverend Mr. John Thorley of Oxon. 206 pp. Ill. London.

1768. A treatise on the management of bees; wherein is contained the natural history of those insects, etc. Thomas Wildman. 169 pp. Ill. London.

1796. The ancient bee-master's farewell; or, full and plain directions for the management of bees to the greatest advantage, etc. John Keys. 252 pp. Dublin.

1829. The pyramidal bee-hive: a plain and natural method of preserving and perpetuating the population of bees, etc. P. Ducouedic. Abridged, and translated from the French by Silas Dinsmoor. 103 pp. Ill. Philadelphia

The bee preserver; or, practical directions for the management and preservation of hives Translated from the French of Jonas De Gelieu. Published at Mulhausen. 134 pp. Edinburgh and London.

A practical treatise on the management of bees; and the establishment of apiaries, with the best method of destroying and preventing the depredations of the bee moth. James Thacher. 162 pp. Boston.

1831. An essay on the practicability of cultivating the honey bee, in maritime towns and cities, as a source of domestic economy and profit. Jerome V. C. Smith. 106 pp. Ill. Boston and New York.

1834. The management of bees. With a description of the "ladies' safety hive." Samuel Bagster, Jun. 244 pp Ill. London.

1839. Humanity to honey bees; or, practical directions for the management of honey bees upon an improved and humane plan. Thomas Nutt. Fifth edition, revised, enlarged and edited by the Rev. Thomas Clark. 281 pp. Ill. Wisbech.

1840. The naturalist's library, conducted by Sir William Jardine. Entomology. Vol. VI. Bees. Rev. W. Dunbar. 301 pp. Ill. Edinburgh, London and Dublin.

1841. Observations on the natural history of bees. Francis Huber. A new edition. 352 pp. Ill. London.

1842. My bee book. William Charles Cotton. 368 pp. Ill. London.

1844. Bees: their natural history and general management. Robert Huish. New edition, greatly enlarged. 458 pp. Ill. London.

1847. The hive and the honey-bee; with plain directions, etc., to which is added an account of the diseases of bees, etc. H. D. Richardson. 107 pp. Ill. Dublin, London and Edinburgh.

1848. A treatise on the production of early swarms of bees by artificial means, etc. Edward Scudamore. Second edition, revised and enlarged. 53 pp. London.

A practical treatise on humanity to honey bees; or, practical directions for the management of honey bees, upon an improved and humane plan, etc. Edward Townley. 162 pp. New York.

1849. The American bee keeper's manual; being a practical treatise on the history and domestic economy of the honey-bee, etc. T. B. Miner. 349 pp. Ill. New York.

1851. The cottage bee keeper; or, suggestions for the practical management of amateur, cottage and farm apiaries, on scientific principles. By a country curate. 119 pp. Ill. New York.

1852. The honey bee. Reprinted from the "Quarterly review." 99 pp. London.

1853. Mysteries of bee-keeping explained: being a complete analysis of the whole subject, etc. M. Quinby. 376 pp. Ill. New York.

1855. Bees: their habits, management and treatment. Rev. J. G. Wood. 114 pp. Ill. London and New York.

1856. The museum of science and art. Edited by Dionysius Lardner. Vol. X. The bee, its character and manners. Ill. pp. 1-112. Steam navigation. Ill. pp. 113-176. Thunder and lightning, and the aurora borealis. Ill. pp. 177-192. Electro-motive power. Ill. pp. 193-208. London.

1857. A practical treatise on the hive and honey-bee. L. L. Langstroth. Second edition, enlarged and illustrated with numerous engravings. 534 pp. New York.

1866. British bees: an introduction to the study of the natural history and economy of the bees indigenous to the British Isles. W. E. Shuckard. 371 pp. Ill. 16 plates. London.

1870. The honey bee; its natural history, physiology and management. Edward Bevan. Revised, enlarged and illustrated by William Augustus Munn. 384 pp. London.

1880. Quinby's new bee-keeping. The mysteries of bee-keeping explained. A complete guide to successful bee-culture. L. C. Root. 270 pp. Ill. New York.

1886. Bees & bee-keeping; scientific and practical. A complete treatise on the anatomy, physiology, floral relations and profitable management of the hive-bee. Frank R. Cheshire. Vol. I. Scientific. 336 pp. Ill. Vol. II. Practical. 652 pp. Ill. London. 2 vols.

1887. The new bee-keepers' text-book. Twenty-sixth edition, being a thorough revision of the old text-book. Enlarged and illustrated. A. J. King. 228 pp. Barrytown, N. Y.

1888. The bee-keeper's guide; or, manual of the apiary. A. J. Cook. Thirteenth edition, revised, enlarged, re-written and beautifully illustrated. 461 pp. Lansing, Mich.

The bee-keeper's manual; founded on the experience, during many centuries, of the apiarians in Poland. Dobrogast Chylinski. 75 pp. Ill. London. (Not dated.)

Miscellaneous pamphlets on bees and bee keeping. Thomas R. Allen, William R. Kelsey, T. B. Miner, James Jones, Aaron Colton, Joseph Doddridge, John M. Weeks, E. W. Phelps, Henry Eddy, John Searle, S. Titcomb, D. L. Adair and Frank Benton. 1815-97. 1 vol.

CLASS III., SECTION 1. — HORTICULTURAL SOCIETIES, ETC. TRANSACTIONS.

Massachusetts. — Transactions of the Massachusetts horticultural society. 1843-46. Volume I., numbers II. and III. (1848, 1852). 1864-95. Boston. Robert Manning. 16 vols.

History of the Massachusetts horticultural society, 1829-78. 545 pp. Ill. Boston. 1880.

A catalogue of the library of the Massachusetts horticultural society. 155 pp. Boston. 1873. Pamphlet.

Report of the twentieth annual exhibition of the Massachusetts horticultural society and third triennial festival held at Faneuil Hall, Sept. 19-22, 1848. 61 pp. Boston. Pamphlet.

Transactions of the Worcester county horticultural society. 1882, 1890-94. Worcester. Pamphlet.

North Carolina. — North Carolina state horticultural society. Thirteenth annual report (1893). Gerald McCarthy. Raleigh. Pamphlet.

Missouri. — Missouri state horticultural society.*

Indiana. — Annual report of the Indiana state horticultural society. Proceedings of the tenth and twentieth annual sessions (1871, 1880). W. H. Ragan. Indianapolis. 2 vols.

Illinois. — Transactions of the Illinois state horticultural society for 1861 and 1862. W. C. Flagg. Chicago. 1 vol.

Michigan. — Annual report of the secretary of the State horticultural society of Michigan: tenth, twelfth, fourteenth, fifteenth, seven-

* See annual report Missouri state board of agriculture.

teenth (1880, 1882, 1884, 1885, 1887), Charles W. Garfield; nineteenth–twenty-sixth (1889–96), Edwy C. Reid. Lansing. 13 vols.

Minnesota. — History of the Minnesota horticultural society, from the first meeting held at Rochester in 1866 to the last at Saint Paul in 1873. 208 pp. Saint Paul. 1873.

Transactions of the Minnesota state horticultural society: 1874–78, John S. Harris and Chas. Y. Lacy; 1881, 1882, U. S. Hollister, Saint Paul. Annual report of the Minnesota state horticultural society: 1883, 1884, Oliver Gibbs, Jr., Lake City; vols. XIII.–XVII. (1885–89), S. D. Hillman, Minneapolis; vol. XVIII. (1890), Samuel B. Green, St. Anthony Park; vols. XIX., XX. (1891, 1892), A. W. Latham, Excelsior. 14 vols.

Kansas. — Kansas horticultural report. Vol. XV. (1885). G. C. Brackett. Lawrence. 1 vol.

California. — Biennial report of the state board of horticulture of the state of California: thirty-eighth and thirty-ninth fiscal years (1887, 1888). Annual report ditto. 1889–92. Biennial report ditto. Fourth and fifth (1893–96). B. M. Lelong. San Francisco. 8 vols.

Quebec — Annual report of the Montreal horticultural society and fruit-growers' association of the Province of Quebec. Thirteenth (1887–88), W. W. Dunlop. Montreal. Pamphlet.

England. — Transactions of the horticultural society of London. Vol. I. (1820). Third edition. Vols. II.–VII. (1817–26). London. 7 vols.

Class III., Section 2. — Horticulture, General Works.

1835. The American gardener's magazine, and register of useful discoveries and improvements in horticulture and rural affairs. Conducted by C. M. Hovey and P. B. Hovey, Jr. Vol. I. Ill. Boston.

1835–38. Horticultural register and gardeners' magazine. Vol. I. (1835), edited by Thomas G. Fessenden and J. E. Teschemacher; Vol. II. (1836), edited by Thomas G. Fessenden and Joseph Breck; Vols. III., IV. (1837, 1838), edited by Joseph Breck. 4 vols. Ill. Boston.

1840. A concise application of the principles of structural botany to horticulture, chiefly extracted from the works of Lindley, Knight, Herbert and others, with additions and adaptations to this climate. J. E. Teschemacher. 90 pp. Boston.

1846. The annals of horticulture; and year-book of information on practical gardening. 576 pp. Ill. London.

1846–60. The horticulturist and journal of rural art and rural taste. Devoted to horticulture, landscape gardening, rural architecture, botany, pomology, entomology, rural economy, etc. Vols. I.–VII. (July, 1846–December, 1852), edited by A. J. Downing. Albany. New series, vols. III., IV. (1853, 1854), edited by P. Barry. Rochester, N. Y. Vol. V. (1855), edited by P. Barry and J. Jay Smith. Philadelphia. Vols. VI., VII. (1856, 1857) edited by J. Jay Smith. Philadelphia. Vols. VIII., XIV. (1858, 1859), edited by J. Jay

Smith. New York. Vol. XV. (1860), edited by Peter B. Mead. New York. 14 vols. Ill.

1858. The magazine of horticulture, botany and all useful discoveries and improvements in rural affairs. Edited by C. M. Hovey. Third series. Vols. IV. and V. (Nos. CCLXXVII.-CCC.), 1858, 1859. Boston. 2 vols.

1893. Horticulture. Ten lectures, delivered for the Surrey county council. J. Wright. 154 pp. Ill. London and New York.

1894. Annals of horticulture in North America for the year 1893. A witness of passing events and a record of progress. Comprising an account of the horticulture of the Columbian exposition. L. H. Bailey. 179 pp. Ill. New York.

1895. The evolution of horticulture in New England. Daniel Denison Slade. 180 pp. New York and London.

1896. The nursery-book. A complete guide to the multiplication of plants. L. H. Bailey. Third edition. 365 pp. Ill. New York and London.

1897. The horticulturist's rule-book. A compendium of useful information for fruit-growers, truck-gardeners, florists and others. L. H. Bailey. 312 pp. New and revised edition. New York and London.

1898. The pruning book. A monograph of the pruning and training of plants as applied to American conditions. L. H. Bailey. 537 pp. Ill. New York and London.

Also there are in the library sample copies of "Horticulture," "The eastern New York horticulturist" and "The Canadian horticulturist."

Class III., Section 3.—Flowers (Floriculture).

1777. Flora Scotica: or, a systematic arrangement, in the Linnæan method, of the native plants of Scotland and the Hebrides. John Lightfoot. 2 vols. 1,151 pp. Ill. London.

1824. Flora historica: or the three seasons of the British parterre historically and botanically treated; with observations on planting, etc. Henry Phillips. 2 vols. 818 pp. London and Edinburgh.

1838. The rose fancier's manual. Mrs. Gore. 434 pp. London.

A flora of North America: containing abridged descriptions of all the know indigenous and naturalized plants growing north of Mexico; arranged according to the natural system. John Torrey and Asa Gray. Vol. I., comprising the polypetalous division of the dicotyledonous or exogenous plants. 711 pp. New York, London and Paris. 1838-40.

1840. Report on the herbaceous flowering plants of Massachusetts, arranged according to the natural orders of Lindley, and illustrated chiefly by popular descriptions of their character, properties and uses. Rev. Chester Dewey. 277 pp. Cambridge, Mass. This volume also contains a "Report on the quadrupeds of Massachusetts." Ebenezer Emmons. 86 pp. Cambridge, Mass.

1845. The florist's guide, containing practical directions for the cultivation of annual, biennial and perennial flowering plants, etc. With a monthly calendar. The whole adapted to the climate of the United States. A new and improved edition. Thomas Bridgeman. 175 pp. New York.

1847. The dahlia; its culture, uses and history. George W. Johnson and J. Turner. 111 pp. Ill. London and Winchester, Eng.

1849. Gardening for ladies; and companion to the flower-garden. Mrs. Loudon. Second American, from the third London edition. Edited by A. J. Downing. 430 pp. Ill. New York and London.

1853. Le bon jardinier almanach pour l'année. 1853. 2 vols. 1,584 pp. Ill. Paris.

1857. Every lady her own flower gardener. Addressed to the industrious and economical. Containing simple and practical directions for cultivating plants and flowers in the garden and in rooms. Louisa Johnson. Revised from the fourteenth London edition, and adapted to the use of American ladies. 96 pp. Ill. New York.

1862. The florist and pomologist. A pictorial monthly magazine of flowers, fruits and general horticulture, conducted by Robert Hogg and John Spencer, assisted by Thomas Moore and numerous able contributors. 192 pp. London, Edinburgh, Dublin and Paris.

1866. Garden flowers: how to cultivate them. A treatise on the culture of hardy ornamental trees, shrubs, annuals, herbaceous and bedding plants. Edward Sprague Rand, Jr. 384 pp. Ill. Boston.

The garden oracle, and floricultural year book. 1866. Edited by Shirley Hibberd. 118 pp. Ill. London.

New book of flowers. Joseph Breck. Newly electrotyped and illustrated. 480 pp. New York. 1866 (?).

1868. Washburn & Co.'s amateur cultivator's guide to the flower and kitchen garden, etc. 147 pp. Ill. Boston. Ditto, 1869. 153 pp. Ill.

Old English wild flowers to be found by the wayside, fields, hedgerows, rivers, moorlands, meadows, mountains and sea-shore. J. T. Burgess. 291 pp. Ill. London and New York.

1876. Orchids. A description of the species and varieties grown at Glen Ridge, near Boston, etc., the whole forming a complete manual of orchid culture. Edward Sprague Rand, Jr. 476 pp. Ill. New York and Cambridge, Mass.

Bulbs: a treatise on hardy and tender bulbs and tubers. Edward Sprague Rand, Jr. 369 pp. Ill. New York and Cambridge, Mass.

1883. Ferns in their homes and ours. John Robinson. Fourth edition. 178 pp. Ill. Boston.

1887. Practical floriculture; a guide to the successful cultivation of florists' plants, for the amateur and professional florist. Peter Henderson. New and enlarged edition. 325 pp. Ill. New York.

1889. The home garden. Ella Rodman Church. 121 pp. Ill. New York.

1891. Alexis and his flowers. Flower lore for boys and girls. Beatrix F. Cresswell. Illustrated by Henrietta Cresswell. 214 pp. London.

1892. Preliminary catalogue of the flora of West Virginia. C. F. Millspaugh. 534 pp. Morgantown.

1893. How to know the wild flowers. A guide to the names, haunts and habits of our common wild flowers. Mrs. William Starr Dana. Illustrated by Marion Satterlee. 298 pp. New York.

Bulbs and tuberous-rooted plants. Their history, description, methods of propagation, etc. C. L. Allen. 311 pp. Ill. New York.

1895. Familiar flowers of field and garden. Described and illustrated by F. Schuyler Mathews. 308 pp. New York.

Window and parlor gardening. A guide for the selection, propagation and care of house plants. N. Jönsson-Rose. 164 pp. Ill. New York.

A garden of pleasure. E. V. B. 220 pp. Ill. Boston.

1896. First report on the flora of Wyoming. Aven Nelson. 218 pp. Ill. Published as bulletin No. 28 of the Wyoming experiment station. Laramie, Wyo.

Carnation culture for amateurs: containing full instructions for the culture of carnations, etc. B. C. Ravenscroft. 84 pp. Ill. London.

1897. Flowers of field, hill and swamp. Caroline A. Creevey. Illustrated by Benjamin Lander. 564 pp. New York.

The dahlia; its history and cultivation. Richard Dean, Robert Fife, John Ballantyne, Stephen Jones, William Cuthbertson. 81 pp. Ill. London and New York.

The water garden. Embracing the construction of ponds, adapting natural streams, planting, hybridizing, seed saving, propagation, etc. William Tricker. 120 pp. Ill. New York.

Familiar features of the roadside. The flowers, shrubs, birds and insects. F. Schuyler Mathews. 269 pp. Ill. New York.

Confidences of an amateur gardener. A. M. Dew-Smith. 299 pp. Ill. London.

1898. Home gardening: a manual for the amateur. Containing instructions for the laying out, stocking, cultivation and management of small gardens, — flower, fruit and vegetable. W. D. Drury. 130 pp. Ill. London.

Pansies, violas and violets. Charles Jordan, Jessie M. Burnie, John Ballantyne, William Cuthbertson. 102 pp. Ill. London and New York.

1899. A guide to the wild flowers. Alice Lounsberry. Illustrated by Mrs. Ellis Rowan. 347 pp. 64 colored plates. New York.

Field, forest and wayside flowers. With chapters on grasses, sedges and ferns. Untechnical studies for unlearned lovers of nature. Maud Going (E. M. Hardinge). 411 pp. Ill. New York.

Not dated. Flowering plants. Mrs. Arthur Bell (N. D'Anvers). 204 pp. Ill. London and Liverpool.

Roses for amateurs: a practical guide to the selection and cultivation of the best roses, etc. The Rev. H. Honywood D'Ombrain. 64 pp. Ill. London.

My own garden; or, the young gardener's year book. Mrs. Loudon. 98 pp. Ill. London.

Hardy perennials and old-fashioned garden flowers. Describing the most desirable plants for borders, rockeries and shrubberies, and including both foliage and flowering plants. John Wood. 330 pp. Ill. London.

Pamphlets.

Report of the government scientific expedition to Bellenden-Ker Range upon the flora and fauna of that part of the colony. 127 pp. Brisbane, Queensland. 1889.

Contributions to the flora of Iowa; a catalogue of the phænogamous plants. J. C. Arthur. 43 pp. Charles City, Ia. 1876.

Statistics of the flora of the northern United States. Asa Gray. 59 pp. From the American journal of science and arts, vol. XXIII.

Also sample copies of the "Boston flower market and New England florist."

CLASS III., SECTION 4.—FORESTRY (ARBORICULTURE).

1799. The practical planter, or, a treatise on forest planting: comprehending the culture and management of planted and natural timber, etc., hedge fences, and the construction of stone walls, etc. Walter Nicol. 430 pp. Edinburgh.

1803. On planting and rural ornament. A practical treatise. Mr. Marshall. The third edition. 2 vols. 862 pp. London.

1823. Sylva florifera: the shrubbery historically and botanically treated; with observations on the formation of ornamental plantations and picturesque scenery. Henry Phillips. 2 vols. 669 pp. London.

1830. The library of entertaining knowledge. Timber trees: fruits. Second edition. 422 pp. Ill. London, Edinburgh, Glasgow, Dublin, Liverpool, Leeds and New York.

1832. The Sylva Americana; or a description of the forest trees indigenous to the United States, practically and botanically considered. D. J. Browne. 408 pp. Ill. Boston.

1842. A history of British forest-trees, indigenous and introduced. Prideaux John Selby. 540 pp. Ill. London.

1844. The tree-lifter; or, a new method of transplanting forest trees. George Greenwood. 112 pp. 1 plate. London.

Arboretum et Fruticetum Britannicum; or, the trees and shrubs of Britain, native and foreign, hardy and half-hardy, pictorially and botanically delineated, etc., with their propagation, culture, management, etc. J. C. Loudon. In 8 vols., 4 of letterpress, illustrated by above 2,500 engravings, and 4 of octavo and quarto plates. Second edition. London.

1846. A report on the trees and shrubs growing naturally in the forests of Massachusetts. George B. Emerson. 547 pp. 17 plates. Boston.

1858 (?). Hedges and evergreens. A complete manual for the cultivation, pruning and management of all plants suitable for American hedging, etc. John A. Warder. 291 pp. Ill. New York.

1884. Report on the forests of North America (exclusive of Mexico). Charles S. Sargent. Department of the interior. Tenth census, vol. IX. 612 pp. Charts. Washington, D. C.

Also, portfolio containing sixteen maps accompanying report on forest trees of North America. Prof. C. S. Sargent. Department of the interior, tenth census.

1885. The earth as modified by human action. A last revision of "Man and nature." George P. Marsh. 629 pp. New York.

Practical forestry. A treatise on the propagation, planting, etc , of all the indigenous trees of the United States, etc., together with notes on a large number of the most valuable exotic species. Andrew S. Fuller. 299 pp. Ill. New York.

1888. Trees and tree-planting. James S. Brisbin. 258 pp. New York.

1889 (?). A year among the trees; or, the woods and by-ways of New England. Wilson Flagg. 308 pp. Ill. Boston.

1890. The trees of northeastern America. Illustrations from original sketches. Charles S. Newhall. 250 pp. New York and London.

1891. Our trees. A popular account of the trees in the streets and gardens of Salem, and of the native trees of Essex county, etc. John Robinson. 120 pp. Salem, Mass.

The leaf-collector's hand-book and herbarium. An aid in the preservation and in the classification of specimen leaves of the trees of northeastern America. Charles S. Newhall. 216 pp. Ill. New York and London.

1892. The oak. A popular introduction to forest-botany. H. Marshall Ward. 175 pp. Ill. New York.

1893. The shrubs of northeastern America. Charles S. Newhall. 249 pp. Ill. New York and London.

1894. Studies in forestry. Being a short course of lectures on the principles of sylviculture, delivered at the botanic garden, Oxford. John Nisbet. 335 pp. Oxford, Eng.

1895. The Adirondack black spruce. William F. Fox. 82 pp. Ill. Albany, N. Y. (Also in the "Annual report of the forest commission," 1894.)

1896. Familiar trees and their leaves. Described and illustrated by F. Schuyler Mathews. 320 pp. New York.

The white pine. A study, with tables of volume and yield. Gifford Pinchot and Henry S. Graves. 102 pp. Ill. New York.

The nut culturist. A treatise on the propagation, planting and cultivation of nut-bearing trees and shrubs adapted to the climate of the United States, etc. Andrew S. Fuller. 289 pp. Ill. New York.

A manual of forestry. William Schlich: Vol. I. Introduction to forestry. Second edition, revised and enlarged. 294 pp. London. 1896. Vol. II. Practical sylviculture, or formation and tending of woods. Second edition, revised. 331 pp. Ill. London. 1897. Vol. III. Forest management. 397 pp. Ill. London. 1895. Vol. IV. Forest protection. W. R. Fisher. Being an English adaptation of "Der forstschutz," by Dr. Richard Hess. 593 pp. Ill. London. 1895. Vol. V. Forest utilization. W. R. Fisher. Being an English translation of "Die forstbenutzung," by Dr. Karl Gayer. 779 pp. Ill. London. 1896. 5 vols.

Forestry Commissions and Associations.

New Hampshire. — Report of the Forestry commission of New Hampshire: 1885, 1891; second (1893); third report, first biennial, vol. I., part III. (1896). Concord. 4 vols. Maps.

Second annual, vol. I., part II. (1894). Pamphlet.

New York. — Annual report of the Forest commission. 1894. Albany. 1 vol. Ill.

Michigan. — Proceedings of the forestry convention held in Grand Rapids, 1888, under the auspices of the Independent forestry commission. 61 pp. Lansing. Pamphlet.

United States. — Proceedings of the American forestry association. Tenth-fifteenth annual meetings. Vols. X.-XII. (1891-97). Washington. 1 vol.

Proceedings of the American forestry congress. Fourth, seventh and ninth annual meetings (1885, 1888, 1890). Pamphlets.

Miscellaneous Pamphlets.

On the planting and management of timber and ornamental trees. P. L. Simmonds. 67 pp. Holt. 1842.

The trees of America. R. U. Piper. Issued quarterly. Four parts, 64 pp. (incomplete). Ill. Boston and New York. 1858.

Notice sur les forêts et leurs produits en rapport avec la superfice totale du territoire et avec la population. Par P. N. Werekha. 37 pp. St.-Pétersbourg. 1873.

Practical suggestions on forest tree planting in Minnesota. Leonard B. Hodges. 20 pp. Saint Paul. 1874.

Catalogue-memoir of a collection of forestal productions exhibited by the general inspection of woods and forests of the Phillipine Islands at the Universal exposition of Philadelphia, U. S. A. Physical description. 46 pp. Catalogue. 2 maps. Manila. 1875.

Protection of forests a necessity. S. v. Dorrien. 33 pp. New York. 1879.

The Hayford process and apparatus for preserving timber. Edward R. Andrews. 24 pp. Philadelphia. 1878.

Additional facts and information in relation to the catalpa tree. E. E. Barney. 36 pp. Dayton, Ohio. 1879.

Trees and tree-planting. With exercises and directions for the celebration of Arbor day. John B. Peaslee. With preface by Warren Higley. 64 pp. Cincinnati, Ohio. 1884.

Planting trees in school grounds and the celebration of Arbor day. Department of the interior, bureau of education. 64 pp. Washington. 1885.

Les etudes de maitre Pierre sur l'agriculture forets, par M. Antonin Rousset. Translated by the Rev. S. W. Powell. 108 pp. Ill. New York. 1886.

Connecticut school documeut number IV. Arbor day. 31 pp. Hartford. 1890.

Annual progress report of State forestry administration in New South Wales. 1890. J. Ednie-Brown. 63 pp. Sydney.

Also vols. III., IV. (1897, 1898) of "The forester." A monthly magazine devoted to the care and use of forests and forest trees and related subjects, and now published by the American forestry association, Washington.

CLASS III., SECTION 5 —LANDSCAPE GARDENING, RURAL ARCHITECTURE.

1836. The gardener's magazine, and register of rural and domestic improvement. J. C. Loudon. Vols. XII.–XIX., being vols. II–VI. of the second decade and vols. I.–III. of the third series. London. 1836–43 8 vols. Ill.

1852. A treatise on the theory and practice of landscape gardening, adapted to North America, etc., with remarks on rural architecture. A. J. Downing. Fourth edition, enlarged, revised and newly illustrated. 532 pp. New York and London.

Cottage residences; or, a series of designs for rural cottages and cottage villas, and their gardens and grounds adapted to North America. A. J. Downing. Fourth edition, revised and improved. 215 pp. Ill. New York.

Parks and pleasure grounds; or practical notes on country residences, villas, public parks and gardens. Charles H. J. Smith. 290 pp. London.

Rural architecture. Being a complete description of farm houses, cottages and out buildings, etc., also the best method of conducting water into cattle yards and houses. Lewis F. Allen. 378 pp. Ill. New York.

The architecture of country houses; including designs for cottages, farm-houses and villas, etc. A. J. Downing. 484 pp. Ill. New York.

1853. Rural essays. A. J. Downing. Edited, with a memoir of the author, by George William Curtis, and a letter to his friends, by Frederika Bremer. 557 pp. Ill. New York.

The book of the garden. Charles M'Intosh. Vol. I. Structural. 776 pp. 34 plates. 1,073 ill. Edinburgh and London. Vol. II. Cultural. 867 pp. 279 ill. Edinburgh and London. 1855.

1854. The American cottage builder: a series of designs, plans and specifications, from $200 to $20,000, for homes for the people. John Bullock. New edition, revised. 326 pp. Ill. New York.

1860. Country life: a handbook of agriculture, horticulture and landscape gardening. R. Morris Copeland. 814 pp. Ill. Boston and New York.

1864. How to lay out a garden; intended as a general guide in choosing, forming or improving an estate, etc. Edward Kemp. Third edition, greatly enlarged, etc. 428 pp. Ill. London.

1892. The formal garden in England. Reginald Blomfield and F. Inigo Thomas. 244 pp. Ill. London.

1893. Art out-of-doors. Hints on good taste in gardening. Mrs. Schuyler Van Rensselaer. 399 pp. New York.

1896. Ornamental gardening for Americans. A treatise on beautifying homes, rural districts, towns and cemeteries. Elias A. Long. 390 pp. Ill. New York.

1897. Lawns and gardens; how to plant and beautify the home lot, the pleasure ground and garden. N. Jönsson-Rose. 414 pp. Ill. New York and London.

1899. How to plan the home grounds. S. Parsons, Jr. With illustrations drawn by W. E. Spader under the direction of the author and of G. F. Pentecost, Jr. 249 pp. New York.

Landscape gardening as applied to home decoration. Samuel T. Maynard. First edition. 338 pp. Ill. New York and London.

Ornamental shrubs for garden, lawn, and park planting. With an account of the origin, capabilities, and adaptations of the numerous species and varieties, native and foreign, and especially of the new and rare sorts, suited to cultivation in the United States. Lucius D. Davis. 338 pp. Ill. New York and London.

Report of the board of metropolitan park commissioners. Pub. Doc. No. 48. 1893-99. 6 vols. Ill. Boston.

Class III., Section 6.—Botany, Vegetable Physiology.

1790. The botanic garden; a poem in two parts. Darwin. Part I., containing the economy of vegetation. A poem, with philosophical notes. 126 pp. Ill. London. 1791. Part II., containing the loves of the plants. A poem, with philosophical notes. Volume the second. The second edition. 202 pp. Ill. London. 1790.

1793. Indigenous botany; or, habitations of English plants: containing the result of several botanical excursions, chiefly in Kent, Middlesex and the adjacent counties, in 1790, 1791 and 1792. Colin Milne and Alexander Gordon. Volume 1. 476 pp. London.

1819. Outlines of botany, taken chiefly from Smith's introduction; containing an explanation of botanical terms and an illustration of the system of Linnæus, etc. John Locke 161 pp Ill. Boston.

1821. Elements of the philosophy of plants: containing the principles of scientific botany; nomenclature, theory of classification, etc. A. P. Decandolle and K. Sprengel. Translated from the German. 486 pp. 8 plates. Edinburgh and London.

1835. Illustrations of vegetable physiology, practically applied, to the cultivation of the garden, the field and the forest; consisting of original observations, collected during an experience of fifty years. James Main. Second edition. 328 pp. Ill. London.

1836. The agriculturist's manual; being a familiar description of the agricultural plants cultivated in Europe, including practical observations respecting those suited to the climate of Great Britain; and forming a report of Lawson's agricultural museum in Edinburgh. Peter Lawson & Son. 430 pp. Edinburgh, London and Dublin. Also contains a supplement of descriptive notices of agricultural

plants introduced within the last six years. 63 pp. Edinburgh and London. 1842.

1842. A popular treatise on vegetable physiology. Published under the auspices of the Society for the promotion of popular instruction. 301 pp. Ill. Philadelphia.

1843. Natural history of New York. A flora of the state of New-York, comprising full descriptions of all the indigenous and naturalized plants hitherto discovered in the state; with remarks on their economical and medicinal properties. John Torrey. 2 vols. 1,056 pp. Many colored plates. Albany.

1844. An introduction to botany, with illustrative engravings. Priscilla Wakefield. The eleventh edition, with considerable improvements etc. 220 pp. 10 colored plates. London.

1846. Reports and papers on botany. On the morphology of the Coniferæ, by Dr. Zuccarini; on botanical geography, by Professor Grisebach; on vegetable cells, by Carl Nägeli; report on botany, by Dr. H. F. Link. 493 pp. 7 plates. London.

1848. Botany for beginners: an introduction to Mrs. Lincoln's lectures on botany. Mrs. Phelps. Stereotype edition. 216 pp. Ill. New York.

1849. Genera Floræ Americæ Boreali-Orientalis Illustrata. The genera of the plants of the United States, illustrated by figures and analyses from nature. Isaac Sprague. Superintended, and with descriptions, etc., by Asa Gray. 2 vols. 459 pp. 186 plates. New York and London.

1851. Elements of botany. Friedrich Schoedler. Edited from the fifth German edition by Henry Medlock. pp. 361-438 Ill. London and Glasgow.

1853. The principles of botany, as exemplified in the cryptogamia. For the use of schools and colleges. Harland Coultas. 94 pp. Ill. Philadelphia.

1856. Withering's British plants. The flowering plants and ferns of Great Britain and Ireland, arranged according to the Linnæan system, etc. William Macgillivray. Ninth edition, revised throughout and adapted to the present state of botany. 476 pp. 16 plates. London.

Manual of the botany of the northern United States. Second edition. Including Virginia, Kentucky and all east of the Mississippi: arranged according to the natural system. Asa Gray. (The mosses and liverworts by Wm. S. Sullivant.) 739 pp. 14 plates. New York Sixth edition, revised and extended westward to the 100th meridian, by Sereno Watson and John M. Coulter. 760 pp. 25 plates. New York, Cincinnati and Chicago. 1889 (?).

Reports of explorations and surveys, to ascertain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean. 1853-54. Volume IV. Report on the botany of the expedition. 193 pp. 35 plates. Washington. This volume also contains 288 pages on astronomical, magnetic and climatological observations.

1857. First lessons in botany and vegetable physiology, to which is added a copious glossary, or dictionary of botanical terms. Asa Gray. 236 pp. Ill. New York.

1859. American weeds and useful plants: being a second and illustrated edition of agricultural botany, etc. William Darlington. Revised, with additions, by George Thurber. 460 pp. Ill. New York.

1866. The phenomena of plant life. Leo H. Grindon. 93 pp. Boston.

Bulletin du Congrés International du Botanique et d'Horticulture, réuni á Amsterdam, les 7, 8, 10 et 11 Avril 1865, en coincidence avec L'Exposition Universelle D'Horticulture. 524 pp. Ill. Rotterdam.

1879. Chronological history of plants: man's record of his own existence illustrated through their names, uses and companionship. Charles Pickering. 1,222 pp. Ill. Boston.

1885. Talks afield about plants and the science of plants. L. H. Bailey, Jr. 173 pp. Ill. Boston and New York.

Plant life on the farm. Maxwell T. Masters. 132 pp. New York.

1886. Insectivorous plants. Charles Darwin. 462 pp. Ill. New York.

The different forms of flowers on plants of the same species. Charles Darwin. 352 pp. Ill. New York.

1887. The propagation of plants, giving the principles which govern the development and growth of plants, etc. Andrew S. Fuller. 349 pp. Ill. New York.

Microscopic botany. A manual of the microscope in vegetable histology. Eduard Strasburger. From the German, by Rev. A. B. Hervey. 382 pp. Ill. Boston.

1888. By-paths of Bible knowledge. X. Scripture natural history. I. The trees and plants mentioned in the Bible. William H. Groser. 235 pp. Ill. London.

Correspondences of the Bible. Part II. The plants, the minerals and the atmospheres. John Worcester. 330 pp. Boston.

1889. The uses of plants: a manual of economic botany, with special reference to vegetable products introduced during the last fifty years. G. S. Boulger. 224 pp. London.

Scientific papers of Asa Gray, selected by Charles Sprague Sargent. Vol. I. Reviews of works on botany and related subjects, 1834–87. 397 pp. Vol. II. Essays: biographical sketches, 1841–86. 503 pp. Boston and New York.

1895. A popular treatise on the physiology of plants for the use of gardeners or for students of horticulture and of agriculture. Paul Sorauer. Translated by F. E. Weiss. 256 pp. Ill. London and New York.

An introduction to the study of seaweeds. George Murray. 271 pp. Ill. London and New York.

Plant-breeding. Being five lectures upon the amelioration of domestic plants. L. H. Bailey. 293. Ill. New York and London.

The power of movement in plants. Charles Darwin, assisted by Francis Darwin. 592 pp. Ill. New York.

1896. An illustrated flora of the northern United States, Canada and the British possessions. Nathaniel Lord Britton and Addison Brown.

Vol. I. Ophioglossaceae to Aizoaceae, ferns to carpet weed. 612 pp. Ill. New York. 1896. Vol. II. Portulacaceae to Menyanthaceae, portulaca to buckbean. 643 pp. Ill. New York. 1897. Vol. III. Apocynaceae to Compositae, dogbane to thistle. 588 pp. Ill. New York. 1898.

The vines of northeastern America. Charles S. Newhall. 207 pp. Ill. New York and London.

Annual report of the state botanist of the state of New York. No. 68 in Senate, January, 1895. Charles H. Peck. Second edition. 241 pp. 44 plates. Albany. (Largely devoted to edible and poisonous fungi of New York.)

1898. A guide to the study of lichens. Albert Schneider. 234 pp. 11 plates. Boston.

A text-book of botany. Dr. E. Strasburger, Dr. Fritz Noll, Dr. H. Schenck and Dr. A. F. W. Schimper. Translated from the German by H. C. Porter. 632 pp. Ill. London and New York.

1899. Corn plants. Their uses and ways of life. Frederick Leroy Sargent. 106 pp. Ill. Boston and New York.

Pamphlets.

A catalogue of American and foreign plants, cultivated in the botanic garden, Cambridge, Mass. W. D. Peck. 60 pp. Cambridge. 1818.

A catalogue of the plants found in New Bedford and its vicinity. E. W. Hervey. 30 pp. New Bedford, Mass. 1860.

Weeds of Maine. F. Lamson Scribner. 62 pp. Ill. Augusta, Me. 1869.

The circulation of sap in plants. W. S. Clark. 48 pp. Ill. Boston. 1874

Observations on the phenomena of plant life. W. S. Clark. 111 pp. Ill. Boston. 1875.

Annals of botany, vol. I. No. I. August, 1887. 129 pp. Ill.

The Russian thistle. Nelson Williams. 15 pp. 4 plates. Fargo, N. D. 1894.

The medicinal plants of Tennessee, exhibiting their commercial value, etc. A. Gattinger. 128 pp. Nashville, Tenn. 1894.

CLASS III., SECTION 7. — PLANT DISEASES: FUNGI AND FUNGICIDES.

1846. Blights of the wheat, and their remedies. Edwin Sidney. 192 pp. Ill. London.

1884. Diseases of field and garden crops. Chiefly such as are caused by fungi. Worthington G. Smith. 353 pp. Ill. London.

1892. Vegetable wasps and plant worms. A popular history of entomogenous fungi, or fungi parasitic upon insects. M. C. Cooke. 364 pp. Ill. London and New York.

1894. Fungi and fungicides. A practical manual concerning the fungous diseases of cultivated plants and the means of preventing their ravages. Clarence M. Weed. 228 pp. Ill. New York.

Text-book of the diseases of trees. R. Hartig. Translated by William Somerville. Revised and edited, with a preface, by H. Marshall Ward. 331 pp. Ill. London and New York.

Pamphlets.

Histoire de la maladie des pommes de terre en 1845. M. J. Decaisne. 127 pp. Paris. 1846.

A synopsis of the several communications on the cause and cure of the potato rot; received by the executive of Massachusetts. Amasa Walker, secretary of the Commonwealth. 48 pp. Boston. 1852.

A treatise on the potato: with an essay to show the cause of the disease and to suggest its remedy. Wm. J. A. Bradford. 46 pp. Boston. 1852.

An essay on the diseases of the grape and the sugar cane. C. E. Goodrich. 58 pp. Utica, N. Y. 1856.

The discovery of a sure and practical remedy for the potato rot. Alden Spooner. 17 pp. Fitchburg, Mass. 1858.

Report of experiments conducted by the Irish land commission during the season of 1892 in the prevention of potato disease. 20 pp. Dublin. 1893.

CLASS III., SECTION 8.—GRAPES (VITICULTURE).

1847. The grape vine: its culture, uses and history. George W. Johnson and Robert Errington. 2 vols. 314 pp. Ill. London, Winchester and Dublin.

1848. A practical treatise on the culture and treatment of the grape vine: embracing its history, etc. J. Fisk Allen. Second edition, enlarged. 247 pp. Ill. Boston.

1853. The cold grapery, from direct American practice: being a concise and detailed treatise on the cultivation of the exotic grape-vine, under glass, without artificial heat. William Chorlton. 95 pp. Ill. New York.

1856. The culture of the grape, and wine-making. Robert Buchanan. With an appendix containing directions for the cultivation of the strawberry, by N. Longworth. Fifth edition. 142 pp. Ill. Cincinnati, O.

1859. The vine-dresser's manual, an illustrated treatise on vineyards and wine-making. Charles Reemelin. 103 pp. New York.

1862. Grape culture, wines and wine-making. With notes upon agriculture and horticulture. A. Haraszthy. 420 pp. New York.

1866. Culture of the grape. W. C. Strong. 355 pp. Ill. Boston.

My vineyard at Lakeview. By a western grape grower. 143 pp. Ill. New York. 1866 (?).

1869. Three seasons in European vineyards: treating of vine-culture; vine disease and its cure; wine-making and wines, red and white; wine drinking as affecting health and morals. William J. Flagg. 332 pp. New York

1884. The viniculture of claret. A treatise on the making, maturing and keeping of claret wines. The Viscount Villa Maior. Translated by Rev. John I. Bleasdale. 148 pp. San Francisco, Cal.

Pamphlets.

A practical treatise on the cultivation of the grape vine on open walls. First American edition. Clement Hoare. 134 pp. Boston. 1837.

Manual pratico do viticultor Brazileiro pelo Dr. Campos da Paz. 151 pp. Ill. Rio de Janeiro. 1898.

CLASS III., SECTION 9.—FRUITS (POMOLOGY).

1803. A treatise on the culture and management of fruit trees; in which a new method of pruning and training is fully described, etc. William Forsyth. To which are added an introduction and notes, adapting the rules of the treatise to the climates and seasons of the United States of America, by William Cobbett. 280 pp. Ill. Albany.

1804. An epitome of Mr. Forsyth's treatise on the culture and management of fruit-trees, etc. Benj. Vaughan. 186 pp. 15 plates. Philadelphia

1816. Hints addressed to proprietors of orchards, and to growers of fruit in general, etc. William Salisbury. 188 pp. Ill. London.

1817. A view of the cultivation of fruit trees, and the management of orchards and cider; with accurate descriptions of the most estimable varieties of native and foreign apples, pears, peaches, plums and cherries, etc. William Coxe. 253 pp. Ill. Philadelphia.

1822. The American orchardist, or a practical treatise on the culture and management of apple and other fruit trees, etc., to which is added the most approved method of manufacturing and preserving cider. James Thacher. 226 pp. Boston.

1823. A treatise on the improved culture of the strawberry, raspberry, gooseberry and currant, etc. Thomas Haynes. Third edition. 112 pp. 4 plates London.

1831. The companion for the orchard. An historical and botanical account of fruits known in Great Britain. Henry Phillips. New edition. 372 pp. Ill. London.

A catalogue of the fruits cultivated in the garden of the Horticultural society of London. Second edition. 165 pp. London.

A guide to the orchard and kitchen garden; or, an account of the most valuable fruit and vegetables cultivated in Great Britain, etc. George Lindley. Edited by John Lindley. 601 pp. London.

1833. The new American orchardist, or an account of the most valuable varieties of fruit, adapted to cultivation in the climate of the United States, etc. William Kenrick. 423 pp. Boston.

1838. Book of fruits: being a descriptive catalogue of the most valuable varieties of the pear, apple, peach, plum and cherry, for New England culture, etc. Robert Manning. First series for 1838. 120 pp. Ill. Salem, Mass.

1841. Pomologia Britannica; or, figures and descriptions of the most important varieties of fruit cultivated in Great Britain. John Lindley. 3 vols. 153 pp. 152 colored plates. London.

1846. The fruit culturist, adapted to the climate of the northern states; containing directions for raising young trees in the nursery, and for the management of the orchard and fruit garden. John J. Thomas. 220 pp. Ill. New York.

1850. Album de Pomologie; par A. Bivort. Tomes troisième et quatrième. 341 pp. Many colored plates. Bruxelles. 1850. 1851. 2 vols.

1851. The fruit garden; a treatise intended to explain and illustrate the physiology of fruit trees, the theory and practice of all operations connected with the propagating, transplanting, pruning and training of orchard and garden trees, etc. P. Barry. 398 pp. Ill. New York.

The fruits and fruit trees of America; or, the culture, propagation and management, in the garden and orchard, of fruit trees generally, etc. A. J. Downing. 594 pp. Ill. New York.

Natural history of New York. Part V. Agriculture. Ebenezer Emmons. Volume III. List of fruits. 81 colored plates. Albany.

1852. The fruits of America, containing richly colored figures and full descriptions of all the choicest varieties cultivated in the United States. C. M. Hovey. 2 vols. 196 pp. Boston. 1852, 1856.

1854. Elliott's fruit book; or, the American fruit-grower's guide in orchard and garden, etc. F. R. Elliott. 503 pp. Ill. New York.

1857. The American fruit book; containing directions for raising, propagating and managing fruit trees, shrubs and plants, etc. S. W. Cole. 288 pp. Ill. Boston and Cleveland, O.

1865. The properties of fruits and vegetables; an unerring guide to judges and exhibitors. George Glenny. 72 pp. London.

The miniature fruit garden; or, the culture of pyramidal and bush fruit trees; with instructions for root-pruning, etc. Thomas Rivers. Thirteenth edition. 134 pp. Ill. London.

1866. The fruit manual: containing the descriptions, synonymes and classification of the fruits and fruit trees of Great Britain, with selected lists of the best varieties Robert Hogg. Third edition. 414 pp. London.

Our common fruits. A descriptive account of those ordinarily cultivated or consumed in Great Britain. Mrs. Bayle Bernard. 294 pp. Ill. London.

1867. The American fruit culturist, containing practical directions for the propagation and culture of fruit trees in the nursery, orchard and garden. John J. Thomas. 511 pp. Ill. New York. Twentieth edition, revised and enlarged by William H. S. Wood. 758 pp. Ill. New York. 1897.

The orchard and fruit garden: their culture and produce. Elizabeth Watts. 188 pp. London.

The small fruit culturist. Andrew S. Fuller. 276 pp. Ill. New York. 1867 (?).

1885. Hand-book for fruit growers, containing a short history of fruits and their value, etc., with a condensed list of varieties suited to climate. F. R. Elliott. New edition, enlarged. 144 pp. Ill. Rochester, N. Y.

1886. Success with small fruits. Edward P. Roe. 319 pp. Ill. New York.

1898. Sketch of the evolution of our native fruits. L. H. Bailey. 472 pp. Ill. New York and London.

Bush-fruits. A horticultural monograph of raspberries, blackberries, dewberries, currants, gooseberries and other shrub-like fruits. Fred W. Card. 537 pp. Ill. New York and London.

Prime facts for the farmer, the fruit grower and the public. M. R. Bartlett. 64 pp. Ill. New York. 1843. Pamphlet.

Specified Fruits.

Apple.

1847. The apple; its culture, uses and history. George W. Johnson and R. Errington. 2 vols Ill. 279 pp. London and Winchester.

1867 (?). American pomology. Apples. John A. Warder. 744 pp. Ill. New York.

1871. The apple culturist. A complete treatise for the practical pomologist. To aid in propagating the apple, and cultivating and managing orchards. Sereno Edwards Todd. 334 pp. Ill. New York.

1886. Field notes on apple culture. L. H. Bailey, Jr. 90 pp. Ill. New York.

Cranberry.

1856 (?). A complete manual for the cultivation of the cranberry, with a description of the best varieties. B. Eastwood. 120 pp. Ill. New York.

1885. Cranberry culture. Joseph J. White. New and enlarged edition. 131 pp. Ill. New York.

The cranberry culturist, being a concise, practical treatise on the cranberry, its history, culture, varieties, etc. F. Trowbridge. 26 pp Ill. New Haven. 1869. Pamphlet.

Olive.

1888. The olive. Its culture in theory and practice. Arthur Tappan Marvin. 146 pp. Ill. San Francisco.

Orange, Lemon, Lime and Citron.

1888. A treatise on citrus culture in California, etc. B. M. LeLong. 96 pp. Ill. Sacramento.

Peach.

1847. The peach; its culture, uses and history. George W. Johnson and R. Errington. 189 pp. Ill. London and Winchester.

1889. Peach culture. James Alexander Fulton. New, revised, and greatly enlarged edition. 204 pp. Ill. New York.

Pear.

1860. Pear culture. A manual for the propagation, planting, cultivation and management of the pear tree, etc. Thos. W. Field. 286 pp. Ill. New York and San Francisco.

Pine Apple.

1847. The pine apple; its culture, uses and history. George W. Johnson and James Barnes. 2 vols. 266 pp. Ill. London, Winchester and Dublin.

Quince.

1888. Quince culture. An illustrated hand-book for the propagation and cultivation of the quince, with descriptions of its varieties, insect enemies, diseases and their remedies. W. W. Meech. 143 pp. New York.

Strawberry.

1847. The strawberry; its culture, uses and history. George W. Johnson and Robert Reid. 126 pp. Ill. London, Winchester and Dublin.

1854. A complete manual for the cultivation of the strawberry; with a description of the best varieties. Also notices of the raspberry, blackberry, currant, gooseberry and grape, etc. R G. Pardee. 144 pp. Ill. New York. Sixth edition. 157 pp. Ill. New York. 1858.

Reports, — Pomological Societies, etc.

Maine. — Transactions of the Maine state pomological society.* 1887. D. H. Knowlton. Augusta. Pamphlet.

Massachusetts. — Massachusetts fruit growers' association. Report of the first four annual meetings, 1895-98. Prof. S. T. Maynard Amherst. Unbound.

New York. — Proceedings of the National convention of fruit growers, held in the city of New York. 1848. 52 pp. New York. Pamphlet.

Michigan. — Annual report of the secretary of the State pomological society of Michigan. Fourth, sixth (1874, 1876). J. P. Thompson. Lansing. 2 vols.

United States. — Proceedings of the American pomological society: second session (1852), F. R. Elliott; third, sixth (1854, 1856), H. W. S. Cleveland; seventh (1858), P. Barry; eighth (1860), Thomas W. Field; thirteenth (1871), F. R. Elliott; fourteenth (1873), Henry T. Williams; fifteenth, sixteenth (1875, 1877), W. C. Flagg; seventeenth (1879), Robert Manning; eighteenth, nineteenth (1881, 1883), W. J. Beal; twentieth, twenty-first (1885, 1887), Charles W. Garfield; twenty-second (1889), A. A. Crozier; twenty-third (1891), George C. Brackett; 5 vols.

Twenty-fourth (1895), George C. Brackett; and twenty-fifth (1897), Wm. A. Taylor. Unbound.

Ontario. — Annual report of the Fruit growers' association of Ontario: twenty-fourth (1892), Linus Woolverton. Toronto. 1 vol.

Also there are in the library sample copies of the "American fruit growers' journal," "The American fruit growers' union," "The strawberry culturist and small fruit grower," and the "Acadian orchardist."

---

* Generally included in the "Agriculture of Maine."

CLASS IV., SECTION 1.—CATTLE, BREEDS, HERD BOOKS.

Angus or Polled Aberdeen.

1882. History of polled Aberdeen or Angus cattle. Giving an account of the origin, improvement and characteristics of the breed. James Macdonald and James Sinclair. 459 pp. Ill. Edinburgh and London.

Ayrshire.

1863. Herd record of the Association of breeders of thorough-bred neat stock. Ayrshires. 63 pp. Hartford. Vol. II. 124 pp. Ill. Springfield, Mass. 1868. 1 vol.

1875. The North American Ayrshire register; wherein every animal is traced to importation. E. Lewis and Jos. N. Sturtevant. 174 pp. Ill. South Framingham, Mass.

1876. The Ayrshire record. New series. American and Canadian Ayrshire herd record. Published by the Ayrshire breeders' association. John Davis William French, editor. Vols. I., II., III. (old series, vols. V., VI., VII.) (1876, 1878, 1881). Boston. 3 vols.

Some information concerning the Ayrshire breed of cattle. Edited by J. D. W. French. 56 pp. Boston. 1878. Pamphlet.

Proceedings of the Ayrshire breeders' association. Twenty-second annual meeting. C. M. Winslow. 40 pp. Brandon, Vt. 1897. Pamphlet.

Devon.

1855. Davy's Devon herd book; containing the names of the breeders, the ages and pedigrees of the Devon cattle, with the prizes they have gained. Arranged by John Tanner Davy. American edition, edited by Sanford Howard. Vols. I.-II. 196 pp. Ill. New York. 2 vols.

1863-76. American Devon herd book, published under the direction of the Association of breeders of thorough-bred neat stock. Arranged by Horace Mills Sessions. Hartford, Conn, and Springfield, Mass. 3 vols. Ill.

Flamand.

1857. Description des espèces bovine, ovine et porcine de la France. Par MM. les Inspecteurs-Généraux de l'Agriculture. Tome I. Espèce bovine—race Flamande. Par M. Lefour. 216 pp. Ill. Paris.

Friesian.

1887. Friesch Rundvee—Stamboek. Pedigree Register. 1887-1889. Leuwarden. 3 vols.

1889. Friesian herdbook. Vols. XV., XVI. (1889, 1890). Ill. Leuwarden. 2 vols.

Guernsey, Alderney.

1872 (?). The Jersey, Alderney and Guernsey cow: their history, nature and management. Willis P. Hazard. Tenth edition. 144 pp. Ill. Philadelphia.

The Alderney and Guernsey cow: its nature and management. Edward Philip Parsons Fowler. 30 pp. Ill. Philadelphia. Pamphlet. Not dated.

The herd register. American Guernsey cattle club. No. 10. May, 1889. Edward Norton. Farmington, Conn. Pamphlet.

The herd register and breeders' journal of the American Guernsey cattle club. Vol. 6. Part 21. January, 1895. Wm. H. Caldwell. Peterboro', N. H. Pamphlet.

Hereford.

1846. The herd book of Hereford cattle. Vols. I.-II. (1846, 1853); T. C. Eyton. III.-IV. (1858, 1859), T. Duckham. London and Hereford. 4 vols. Ill.

Holstein.

1872. Holstein herd book: containing a record of the Holstein cattle in the United States, also a sketch of the Holstein race of cattle. Winthrop W. Chenery. Published by authority of the Association of breeders of thoroughbred Holstein cattle. 71 pp. Ill. Boston.

Also sample copies of the "Holstein-Friesian register," devoted to Holstein-Friesian cattle and dairying. Brattleboro, Vt.

Jersey.

American Jersey herd book. Published under the direction of the Association of breeders of thoroughbred neat stock. Vol. II. John Brooks. Worcester, Mass. Ill. Pamphlet. 1868.

Herd record of the Association of breeders of thoroughbred neat stock. Jerseys. Worcester, Mass. Pamphlet.

Sample copy of "The Jersey bulletin." Vol. XV. No. 44. 1896. Indianapolis, Ind.

Shorthorn, Durham.

1822. The general short-horned herd book: containing the pedigrees of short-horned bulls, cows, etc., of the improved Durham breed, from the earliest account, to the year 1822. George Coates. 602 pp. Ill. Otley, Eng.

1843. The herd-book: containing the pedigrees of improved short-horned bulls. Vol. fourth. George Coates. 787 pp. Ill. Doncaster, Eng.

1844. The herd-book: containing pedigrees of improved short-horned cows, etc. Vol. fifth. Parts I. and II. George Coates. 1,132 pp. Ill. Doncaster, Eng. 2 vols.

1846. Coates' herd book: containing the pedigrees of improved short-horned bulls, from the earliest period, as given in the first, second and third volumes. Revised by H. Strafford. 531 pp. Ill. London. Ditto "Cows." 860 pp. Ill. London. 1847. 2 vols.

Coates' herd book: containing the pedigrees of improved short-horned cattle. H. Strafford. Vols. sixth-sixteenth. Ill. London. 1846-65. 11 vols.

1849. De la race bovine courte corne améliorée dite race de Durham en Angleterre aux États-Unis D'Amérique et en France. Par M. G.

Lefebvre-Ste-Marie. Publié par ordre de M. le Ministre de L'Agriculture et du Commerce. 352 pp. Paris.

1855. The American herd book, containing pedigrees of short-horned cattle, with introductory notes. Lewis F. Allen. 7 vols. Ill. Buffalo, N. Y. 1855-66.

Herd record of the Association of breeders of thorough-bred neat stock. Short-horns. 86 pp. Ill. Hartford, Conn. Pamphlet. 1863.

Die Racen, Züchtung, Ernährung und Benutzung des Kindes. Dr. Georg May. 577 pp. Ill. München.

1893. Horses, cattle, sheep and swine. Origin, history, improvement, description, characteristics, merits, objections, adaptability, etc., of each of the different breeds, etc. Geo. W. Curtis. Second edition, revised and enlarged. 343 pp. Ill. New York.

Class IV., Section 2.—Cattle Raising (Dairying).

1776. A treatise on cattle: shewing the most approved methods of breeding, rearing and fitting for use, etc. John Mills. 498 pp. London.

1794. Observations on live stock; containing hints for choosing and improving the best breeds of the most useful kinds of domestic animals. George Culley. The second edition, altered and enlarged. 222 pp. Ill. London.

1825. A treatise on the dairy breed of cows and dairy husbandry; with an account of the Lanarkshire breed of horses, etc. William Aiton. 195 pp. Ill. Edinburgh, Glasgow and London.

1829. The Harleian dairy system; and an account of the various methods of dairy husbandry pursued by the Dutch, etc. William Harley. 288 pp. Ill. London.

1834. Cattle; their breeds, management and diseases; with an index. W. Youatt. 600 pp. Ill. London.

1841. Cours de multiplication et de perfectionnement des principaux animaux domestiques, ou l'on traite de leurs services et de leurs produits. Par L.-F. Grognier. Troisième èdition, par H. Magne. 709 pp. Paris and Lyon.

1846. Experimental researches on the food of animals, and the fattening of cattle. With remarks on the food of man. Based upon experiments undertaken by order of the British goverment. Robert Dundas Thomson. From the last London edition. 172 pp. New York and Philadelphia.

1849. Concours d'Animaux de Boucherie a Poissy, Lyon et Bordeaux depuis la fondation du concours de Poissy, en 1844, jusqu a ce jour. Compte rendu des opérations des concours et du rendement des animaux primés. Publié par ordre de M. le Ministre de L'Agriculture et du Commerce. 293 pp. Ill. Paris. 1849. This volume also contains account of "concours" en 1850 a Bordeaux, Lyon, Lille et Poissy. 150 pp. Ill. Paris. 1850. A second volume contains account of the "concours" en 1851 a Bordeaux, Nimes, Lyon, Lille et Poissy. 235 pp. Ill. Paris. 1851. And "concours" en 1852

a Bordeaux, Nimes, Lyon, Lille, Nantes et Poissy. 249 pp. Ill. Paris. 1852. 2 vols.

1851. The breeding and economy of live stock, etc. James Dickson. 219 pp. Edinburgh.

The dairyman's manual: being a complete guide for the American dairyman. Gurdon Evans. 235 pp. Ill. Utica, N. Y. and Hartford, Conn.

Concours régionaux d'animaux reproducteurs, d'instruments, machines, ustensiles ou appareils, etc., tenus à Saint-Lô, à Aurillac et a Toulouse et concours national de Versailles. 355 pp. Ill. Paris. 1851. A second volume contains account of the "concours" tenus à Saint-Lô, Tolouse, Nancy, Amiens, Angers, Limoges et Nevers, et concours national de Versailles. 475 pp. Ill. Paris. 1852. 2 vols.

Anleitung zur Kindviehzucht. H. W. v. Pabst. 240 pp. Ill. Stuttgart und Tübingen.

1853. On the domesticated animals of the British Islands: comprehending the natural and economical history of species and varieties, etc. David Low. 767 pp. Ill. London, Eng., and Boston, Mass.

1856. A treatise on milch cows, etc. M. Francis Guenon. Translated from the French by N. P. Trist, with introductory remarks and observations on the cow and the dairy by John S. Skinner. Sixty-third thousand. 88 pp. Ill. New York.

1858. Evil results of over-feeding cattle. Frederick James Gant. 39 pp. Ill. London.

1859. Milch cows and dairy farming; comprising the breeds, etc., and the production of milk, butter, and cheese, etc., with a treatise upon the dairy husbandry of Holland; to which is added Horsfall's system of dairy management. Charles L. Flint. 416 pp. Ill. New York, Boston, Philadelphia and Cincinnati. Revised edition. 452 pp. Ill. Boston and New York. 1889.

1861. The principles of breeding: or, glimpses at the physiological laws involved in the reproduction and improvement of domestic animals. S. L. Goodale. 164 pp. Boston.

1862. Das Kind. Seine innere und äuzere organisation, Züchtung, Ernährung und Benutzung, sowie dessen Krankheiten. Dr. Georg May. 483 pp. Ill. München.

1868. American cattle: their history, breeding and management. Lewis F. Allen. 528 pp. Ill. New York.

1871 (?). Willard's practical dairy husbandry: a complete treatise on dairy farms and farming, etc. X. A. Willard. 547 pp. Ill. New York.

1880. A manual on cattle: for the use of the farmers of Georgia. J. T. Henderson. 191 pp. Ill. Atlanta, Ga.

1883. Guenon on milch cows. A treatise upon the bovine species in general. Translated from the last and enlarged edition of F. Guenon by Thos. J. Hand. 131 pp. Ill. New York.

1884. Stock-breeding: a practical treatise on the applications of the laws of development and heredity to the improvement and breeding of domestic animals. Manly Miles. 428 pp. Ill. New York.

1885. Essays on the soiling of cattle, illustrated from experience, etc. Josiah Quincy. 121 pp. New York.

1886. Cattle and cattle-breeders. William M'Combie. Edited by James Macdonald. Fourth edition, revised and extended. 157 pp. Edinburgh and London.

1887. Manual of cattle feeding, etc. Henry P. Armsby. Third edition. 525 pp. Ill. New York.

Cattle and dairy farming. United States consular reports. 855 pp. Ill. Washington, D. C.

1888. Feeding animals: a practical work upon the laws of animal growth, etc. Elliott W. Stewart. Fourth edition. 557 pp. Ill. Lake View, N. Y.

The dairyman's manual. A practical treatise on the dairy, etc. Henry Stewart. 475 pp. Ill. New York.

Keeping one cow. Being the experience of a number of practical writers, in a clear and condensed form, upon the management of a single milch cow. New, enlarged edition. 136 pp. Ill. New York.

1893. The complete grazier and farmer's and cattle-breeder's assistant. A compendium of husbandry, etc. William Youatt. Thirteenth edition, re-written, considerably enlarged and brought up to the present requirements of agricultural practice. William Fream. 1,086 pp. Ill. London.

British dairying. A handy volume on the work of the dairy farm, etc. J. P. Sheldon. 170 pp. Ill. London.

Farm live stock of Great Britain. Robert Wallace. Third edition, revised and enlarged. 350 pp. Ill. London.

1894. American dairying. A practical treatise on dairy farming and the management of creameries. H. B. Gurler. 267 pp. Ill. Chicago.

1895. The principles of modern dairy practice from a bacteriological point of view. Gösta Grotenfelt. Authorized American edition by F. W. Woll. Second edition. 285 pp. Ill. New York and London.

1896. "Cow culture." Dairying, its essential conditions and conduct, and their adaptability to Kansas. Edited by F. D. Coburn. 264 pp. Ill. Topeka.

1898. Feeds and feeding. A hand-book for the student and stockman, W. A. Henry. 657 pp. Madison, Wis.

Not dated. Choix des vaches laitières ou description des signes à l'aide desquels on peut apprécier les qualités lactifères des vaches. H. Magne. Seconde édition. 120 pp. 8 plates. Paris.

Manuel de l'éleveur de Betes a Cornes. Par Félix Villeroy. Seconde èdition. 431 pp. Ill. Paris.

Pamphlets.

Observations on live stock. George Culley. 103 pp. New York. 1804.

Traité des vaches laitières. Francois Guénon. 112 pp. Ill. Bordeaux. 1838.

A method of increasing the yield of the milch-cow, by selecting the proper animals for the dairy; according to Guenon's discovery. 54 pp. Ill. Philadelphia. 1853.

La connaissance générale du bœuf. L. Moll et Eug. Gayot. Planches dessinées par M. Rouyer et gravées par M. Huyot. 83 plates. No text. Paris. 1860.

Prize essays on cooked and cooking food for domestic animals of the farm. E. W. Stewart, W. H. White, John Wilkinson. 64 pp. East Bethany, N. Y., and Philadelphia. 1869.

An illustrated essay on dairy rooms and dairy farming. J. Wilkinson. 40 pp. Baltimore, Md. 1874.

Some materials towards a history of the cattle of Maine. Samuel L. Boardman. 48 pp. Augusta. 1875.

How to select cows; or, the Guenon system simplified, explained and practically applied. Willis P. Hazard. 84 pp. Ill. Philadelphia. 1879.

The Columbian dairy cattle tests at the World's fair. Chicago. 1893. James Cheesman. 32 pp. Southborough, Mass. 1894.

Dairying for profit or the poor man's cow. Mrs. E. M. Jones. 66 pp. Ill. New York. 1896.

Range and ranch cattle traffic of the United States (foreign circular). 15 pp. Charts. New York.

CLASS IV., SECTION 3.—VETERINARY SCIENCE, ANIMAL DISEASES.

1786. Observations on certain parts of the animal œconomy. John Hunter. 225 pp. Ill. London.

1844. A practical treatise on the breeding cow, and extraction of the calf, before and at the time of calving, etc., including observations on the diseases of neat cattle generally; containing profitable instructions to the breeding farmer, cowkeeper and grazier, etc. Edward Skellett. 364 pp 13 plates London.

1849. Popular essay on pleuro-pneumonia, the prevailing fatal disease among cattle. James M'Gillavray. 47 pp. Aberdeen, Peterhead, Elgin, Huntly, Edinburgh and Glasgow.

1853. The American cattle doctor; containing the necessary information for preserving the health and curing the diseases of oxen, cows, sheep and swine, etc. G. H. Dadd. 359 pp. New York.

Every man his own cattle doctor; containing the causes, symptoms and treatment of all the diseases incident to oxen, sheep, swine, poultry and rabbits. Francis Clater. Eleventh edition, revised throughout, and containing many important additions. Edward Mayhew. 393 pp. London.

1855. Hippopathology; a systematic treatise on the disorders and lamenesses of the horse, with their most approved methods of cure, etc. William Percival. A new edition, thoroughly revised, with extensive additions. Vol. I. Inflammation, etc. 307 pp. Ill. London. 1855. Vol. II. Part 1. The diseases of the chest and air-passages of the horse. pp. 1-224. London 1853. Vol II. Part II. The diseases of the digestive organs of the horse, including those of his urinary and generative systems. pp 225-595. Ill. London. 1855. Vol. III. Disorders of the horse. 358 pp. London. 1843. Vol. IV. Part 1. Lameness in the horse. pp. 1-271. Plates 1-10.

London. 1849. Vol. IV. Part II. Lameness in the horse. pp. 272–514. Plates 11–13. London. 1852. 6 vols.

1860. Miscellaneous papers on pleuro-pneumonia in Massachusetts. 1 vol.

1863. Cattle and their diseases. Embracing their history and breeds, crossing and breeding, etc. Robert Jennings. 340 pp. Ill. Philadelphia and New York.

1865 (?). Diseases of stock of the farm. Part first. A. J. Murray. 92 pp. Ill. Edinburgh and London.

1867. First and second reports of the special committee appointed by the executive board of the New York state agricultural society, on the statistics, pathology and treatment of the epizoötic disease known as the rinderpest. A. B. Conger. 144 pp. 12 colored plates. Albany.

1869. Report of the New York state cattle commissioners, in connection with the report of the metropolitan board of health, in relation to the Texas cattle disease. In Senate, No. 9, March 12, 1869. 148 pp. 32 plates. Albany.

The diseases of sheep explained and described, with the proper remedies to prevent and cure the same. With an essay on cattle epidemics. Especially dedicated to the use of farmers, sheep-owners, etc. Henry Clok. 146 pp. Ill. Philadelphia.

1871. Animal plagues: their history, nature and prevention. George Fleming. Vol. I., from B.C. 1490 to A.D. 1800. 548 pp. London. Vol II., from A.D. 1800 to 1844. 539 pp. London, Paris and Madrid. 1882.

1878. Information in relation to disease prevailing among swine and other domestic animals, communicated to the Senate by the President of the United States, in compliance with a resolution of the Senate of Feb. 20, 1878. 149 pp. Washington.

1879. The four bovine scourges, — pleuro-pneumonia, foot-and-mouth disease, cattle plague, tubercle (scrofula). With an appendix on the inspection of live animals and meat. Thomas Walley. 215 pp. 11 plates. Edinburgh and London.

1881. Bovine tuberculosis in man. An account of the pathology of suspected cases. Charles Creighton. 119 pp. 6 plates. London.

1882. Report of the treasury cattle commission on the lung plague of cattle, or contagious pleuro-pneumonia. 47th Congress, 1st session. Senate. Ex. Do. No. 106. 138 pp. Washington.

The principles and practice of bovine medicine and surgery: with 153 illustrations, 19 coloured plates, and a chapter showing the influence of disease on meat and milk, and the practical methods of examination. J. Woodroffe Hill. 664 pp. London and New York.

1884 (?). The influence of heredity and contagion on the propagation of tuberculosis, and the prevention of injurious effects from consumption of the flesh and milk of tuberculous animals. Herr A. Lydtin. G. Fleming and M. van Hertsen. 175 pp. London and New York.

The relation of animal diseases to the public health, and their prevention. Frank S. Billings. 446 pp. New York.

1887. A manual of veterinary hygiene. Fred Smith. 477 pp. Ill. London.

The farmer's veterinary adviser. A guide to the prevention and treatment of disease in domestic animals. James Law. Eighth edition. 520 pp. Ill. This book also contains "The lung plague of cattle, contagious pleuro-pneumonia." James Law. 97 pp. Ill. Ithaca, N. Y.

The American cattle doctor: a complete work on all the diseases of cattle, sheep and swine, including every disease peculiar to America, and embracing all the latest information on the cattle plague and trichina, etc. Geo. H. Dadd. 367 pp. Ill. New York.

1888. Swine plague, with especial reference to the porcine pests of the world. An etiological, patho-anatomical, prophylactic and critical contribution to general pathology and state medicine. Frank S. Billings. 414 pp. 12 plates. Lincoln, Neb.

Animal castration. A. Liautard. 148 pp. Ill. New York and London.

1890. Ætiology of tuberculosis. R. Koch. Translated by Rev. T. Saure. 97 pp. New York.

1892. Roaring in horses: its pathology and treatment. P. J. Cadiot. Translated from the original by Thomas J. Watt Dollar. 78 pp. Ill. New York and London.

Horses in accident and disease. Notes and sketches. J. Roalfe Cox. Unpaged. 28 cases. Edinburgh.

A manual of veterinary physiology. Veterinary-Captain F. Smith. 414 pp. Ill. London and New York.

1893. Horses: sound and unsound, with the law relating to sales and warranty. J. Irvine Lupton. 211 pp. Ill. New York and London.

1895. The stock-owners' guide. A handy medical treatise for every man who owns an ox or cow. George S. Heatley. 172 pp. New York and Edinburgh.

A practical guide to meat inspection. Thomas Walley. Second edition, revised and enlarged. 207 pp. 47 colored ills. New York.

A hand-book on tuberculosis among cattle, with considerations of the relation of the disease to the health and life of the human family, and of the facts concerning the use of tuberculin as a diagnostic test. Henry L. Shumway. 178 pp. Ill. Boston.

1897. The animal tuberculoses and their relation to human tuberculosis. Ed. Nocard. Translated by H Scurfield. 143 pp. New York.

The diseases of horses, their pathology, diagnosis, and treatment; to which is added a complete dictionary of equine "Materia medica." Hugh Dalziel. 102 pp. London. 1897(?).

1899. Cattle tuberculosis. A practical guide to the farmer, butcher, and meat inspector. T. M. Legge and Harold Sessions. 77 pp. Ill. New York.

American veterinary review. Edited and published by A. Liautard. Vols. XII.-XVIII., XX.-XXII. (April, 1888-March, 1895; April, 1896-March, 1899). 10 vols. New York. Also vols. X., XI. and XIX., incomplete and unbound.

The Journal of comparative medicine and surgery. Vols. IV., VI.-VIII. (1883, 1885-87). New York and London. Volumes incomplete and unbound.

Sample copies "Journal d'économie rurale, de Médicine et de Chirurgie Vétérinaire." Montreal, Can.

Pamphlets.

The southern cattle plague (Texas fever) of the United States, with especial relation to its resemblance to the yellow fever. An etiological study. Frank S. Billings. 141 pp. Ill. Lincoln, Neb. 1888.

Report on the outbreak of contagious venereal disease amongst horses in the county of Kent, Ontario. Peter H. Bryce. 63 pp. Toronto. 1889.

Preventive inoculation. Frank S. Billings. 56 pp. Philadelphia. 1890.

Special report on bovine tuberculosis. Clinical and pathological notes on the herd of cattle belonging to the state hospital for the insane, Norristown, Pa. Florence Hull Watson. 140 pp. Ill. Norristown, Pa. 1895.

Pamphlet No. 1: 1896. On meat and milk inspection. Issued by Provincial board of health of Ontario. P. H. Bryce. 33 pp. Toronto. 1896.

Report of the royal commission appointed to inquire into the effect of food derived from tuberculous animals on human health. 24 pp. London. 1895. Also administrative procedures for controlling danger to man through the use as food of the meat and milk of tuberculous animals. 27 pp. London. 1898.

The veterinary profession. Its relation to the health and wealth of the nation, and what it offers as a career. 88 pp. Ill. Philadelphia. 1897.

*Annual Reports of Cattle Commissioners, etc.**

Maine.—Report of commissioners on contagious diseases of animals. 1889-98. Augusta. 6 vols.

Vermont.—Report of the board of agriculture as cattle commissioners. 1898. pp. 26-59 of statistical report. Burlington. Pamphlet.

Massachusetts.—Annual report of the board of cattle commissioners of the Commonwealth of Massachusetts. 1889-98. (Pub. Doc. No. 51.) Boston. 1 vol. Also 1879 and 1887 as pamphlets.

Rhode Island.—Report of the board of cattle commissioners. 1871, 1878. Providence. Pamphlets.

Connecticut.—Report on the diseases of the domestic animals in Connecticut. Second (1873). Noah Cressy. Report of commissioners of diseases of domestic animals. 1894. Pamphlets.

United States.—Proceedings and debates of the American convention of cattle commissioners, held at Springfield, Ill., Dec. 1-3, 1868. 163 pp. Springfield, Ill. 1869. Pamphlet.

England.—An abstract of the proceedings of the veterinary medical association: first-third sessions (1836-39). London. 1 vol.

---

* Usually included in the reports of boards of agriculture, etc.

CLASS IV., SECTION 4.—SHEEP AND WOOL.

1747. Chronicon Rusticum-Commericale; or, memoirs of wool, etc. Being a collection of history and argument, concerning the woolen manufacture in general, etc., also an account of the several laws, etc. John Smith. Vol. II. 576 pp. London.

1809. An essay on wool, containing a particular account of the English fleece. With hints for its improvement, addressed to the grower, dealer and manufacturer. John Luccock. 360 pp. London.

Facts and observations relative to sheep, wool, ploughs and oxen: in which the importance of improving the short-wooled breeds of sheep, by a mixture of the Merino blood, is demonstrated from actual practice: together with some remarks on the advantages which have been derived to the author's flock from the use of salt, etc. John Lord Somerville. Third edition, enlarged. 256 pp. Ill. London.

A treatise on the diseases and management of sheep; with introductory remarks on their anatomical structure; and an appendix containing documents exhibiting the value of the Merino breed of sheep, and their progress in Scotland. Sir George Steuart Mackenzie, Bart. 180 pp. Ill. Edinburgh and London. This book also contains "Practical observations on the improvement and management of mountain sheep, and sheep farms; also remarks on stock of various kinds." John Little. 198 pp. Edinburgh and London. 1815.

1837. Sheep: their breeds, management and diseases. To which is added the mountain shepherd's manual. W. Youatt. 596 pp. Ill. London. This book also contains "Hints for the practical administration of the poor laws." 19 pp. London. 1832. Also "A practical treatise on the best mode of repairing roads, with some observations upon the present system." Charles Penfold. 27 pp.

1840. A treatise on sheep; addressed to the flock-masters of Australia, Tasmania and southern Africa, etc. Thomas Southey. 118 pp. London.

1841. A treatise on sheep, with the best means for their improvement, general management, and the treatment of their diseases. With a chapter on wool, and the wool trade; and an additional chapter on the management of sheep in Australia. Ambrose Blacklock. First American edition. 228 pp. Ill. New York.

1842. A comprehensive history of the woolen and worsted manufactures, and the natural and commercial history of sheep, from the earliest records to the present period. James Bischoff. 2 vols. 954 pp. Ill. London and Leeds.

1844. The history, structure, economy and diseases of the sheep. In three parts. Illustrated with fine engravings from drawings by W. Harvey. W. C. Spooner. 466 pp. London.

1859. Sheep husbandry; with an account of the different breeds, and general directions in regard to summer and winter management, breeding and the treatment of diseases. Henry S. Randall. 320 pp. Ill. New York.

1863. The practical shepherd: a complete treatise on the breeding, management and diseases of sheep. Henry S. Randall. 454 pp. Ill. Philadelphia and Rochester, N. Y.

Fine wool sheep husbandry. Henry S. Randall. With a statistical appendix. 189 pp. New York. 1863 (?).

1883. Flock book of Shropshire sheep. Vol. I. Rams from No. 1 to 1331. 130 pp. Shrewsbury, Eng.

1885. The shepherd's manual. A practical treatise on the sheep. Designed especially for American shepherds. Henry Stewart. New edition, revised and enlarged. 276 pp. Ill. New York.

1887. The American Merino: for wool and for mutton. A practical treatise on the selection, care, breeding and diseases of the Merino sheep in all sections of the United States. Stephen Powers. 368 pp. Ill. New York.

1889. Sheep, swine and poultry; embracing the history and varieties of each; the best modes of breeding, etc. Robert Jennings. In three parts. 500 pp. Ill. Philadelphia.

Bulletin of the National association of wool manufacturers; a quarterly journal. Vols. VI., XIII., XV., XVII.-XIX. (1876, 1883-84, 1887-89). Boston. 7 vols. Vols. XII., XVI., XXIV.-XXVII. (1882, 1886, 1894-97). Incomplete and unbound.

Pamphlets.

Sheep husbandry: a treatise on sheep, wool and mutton; also a description of breeds and races, etc. By a practical farmer. 53 pp. Ill. Boston. 1861.

The Angora goat: its origin, culture and products. John L. Hayes. 38 pp. Boston. 1868.

The wool-growers' manual, a treatise on sheep husbandry in Missouri. Sam. P. Boardman. 34 pp. Jefferson City, Mo. 1868.

The resources of the United States for sheep husbandry and the wool manufacture. John L. Hayes. 43 pp. Boston. 1878.

Annual report of the Sheep breeders' association of the Province of Ontario. Sixth, seventh (1893, 1894). Toronto.

CLASS IV., SECTION 5. — SWINE.

1811. A treatise on the breeding of swine, and curing of bacon; with hints on agricultural subjects. Robert Henderson. 118 pp. Leith, Edinburgh, Glasgow, Dundee, Aberdeen and London.

1885. Harris on the pig. Breeding, rearing, management and improvement. Joseph Harris. New and enlarged edition, revised by the author. 273 pp. Ill. New York.

Swine husbandry. A practical manual for the breeding, rearing and management of swine, and the prevention and treatment of their diseases. F. D. Coburn. New, revised, and enlarged edition. 295 pp. Ill. New York.

Pamphlets.

The hog; his origin and varieties, management with a view to profit, and treatment under disease. H. D. Richardson. 64 pp. Ill. New York. 1852.

Illustrated manual of swine and swine breeding, with notes on diseases common to the hog, and treatment thereof. Shepard & Alexander. 35 pp. Ill. Terre Haute, Ind. 1872.

Premium essay on the origin, breeding and management of Berkshire swine. A. B. Allen. 23 pp. Springfield, Ill. 1876.

The hog: the varieties to raise, general management and diseases. Thomas Pollard. 77 pp. Richmond, Va. 1878.

Hog raising and pork-making. Rufus Bacon Martin. 72 pp. Ill. New York. 1886.

The swine industry. James Cheesman. 47 pp. Ill. Toronto. 1888.

Annual report of the Swine breeders' association of the Province of Ontario. Fifth, sixth (1893, 1894). Toronto.

CLASS IV., SECTION 6.—HORSES.

1816. The complete farrier, and British sportsman: containing a systematic enquiry into the structure and animal economy of the horse, etc., with numerous approved and original recipes for various diseases. Including a faithful delineation of the various dogs used in the sports of the field, with canine pathology, etc. Richard Lawrence. 512 pp. Ill. London.

1831. Library of useful knowledge. The horse; with a treatise on draught; and a copious index. 472 pp. Ill. London.

1845 (?) The new American pocket farrier and farmer's guide in the choice and management of horses, neat cattle, sheep and swine, etc., from the writings of Youatt, Lawrence, Hines, White, Clayter and others. To which is added a variety of agricultural and miscellaneous receipts. 284 pp. Ill. Philadelphia.

1848. The horse. William Youatt. New edition, with numerous illustrations. Together with a general history of the horse; a dissertation on the American trotting horse, how trained and jockeyed, an account of his remarkable performances; and an essay on the ass and the mule, by J. S. Skinner. 448 pp. Ill. Philadelphia.

1850. The pictorial gallery of English race horses; containing portraits of all the winners of the Derby, Oaks and St. Leger stakes, during the last twenty years; and a history of the principal operations of the turf. George Tattersall. Illustrated by ninety engravings, chiefly on steel, after paintings by Cooper, Herring, Hancock, Alken, Hall and others. 386 pp. London.

1854. Stable economy. A treatise on the management of horses in relation to stabling, grooming, feeding, watering and working. John Stewart. Sixth edition. 436 pp. Ill. Edinburgh and London.

1856. The horse's foot, and how to keep it sound. William Miles. From the third London edition. 70 pp. Ill. New York.

The American farrier; containing a minute account of the formation of every part of the horse, from the extremity of the head to the hoof. With a description of all the diseases to which each part is liable, etc., accompanied with a copious alphabetical list of medicines, etc. H. L. Barnum. 286 pp. Ill. Philadelphia.

A method of horsemanship, founded upon new principles: including the breaking and training of horses; with instructions for obtaining a good seat. F. Baucher. Third American edition, revised and corrected from the ninth Paris edition. 254 pp. Ill. Philadelphia.

1857. Morgan horses: a premium essay on the origin, history and characteristics of this remarkable American breed of horses, etc. D C Linsley. 340 pp. Ill New York.

Frank Forester's horse and horsemanship of the United States and British Provinces of North America With steel-engraved original portraits of celebrated horses. Henry William Herbert. 2 vols. 1128 pp. New York and London.

Rural economy; a treasury of information on the horse, pony, mule, ass, cow-keeping, sheep, pigs, goat, honey-bee, poultry, etc. Martin Doyle. 156 pp. Ill. London and New York.

1858. The gentleman's new pocket farrier: comprising a general description of the noble and useful animal, the horse; with modes of management in all cases, and treatment in disease. Richard Mason. To which is added a prize essay on mules; an appendix containing recipes, etc., annals of the turf, American stud-book, rules for training, racing, etc. 415 pp. Ill. Philadelphia. This book also contains a "Supplement to Mason and Hind's popular system of farriery, comprising an essay on domestic animals," etc. J. S. Skinner. 101 pp. Philadelphia.

Farriery, taught on a new and easy plan; being a treatise on the diseases and accidents of the horse, etc. John Hinds. With considerable additions and improvements, particularly adapted to this country, by Thomas M. Smith. 224 pp. Ill. Philadelphia. This book also contains a "Supplement to Mason and Hind's popular system of farriery, comprising an essay on domestic animals, especially the horse," etc. J. S. Skinner. 101 pp. Philadelphia.

1859. The farmer's practical horse farriery, etc., to which is prefixed an account of the breeds in the United States. Compiled by E. Nash. 10th thousand, revised. 198 pp. Ill. Auburn, N. Y, and New York.

1860. Youatt on the structure and the diseases of the horse, with their remedies, etc. W. C. Spooner. To which is prefixed an account of the breeds in the United States, compiled by Henry S. Randall. 483 pp. Ill. New York.

The horse and his diseases: embracing his history and varieties, breeding and management and vices, etc. Robert Jennings. 390 pp. Ill. Philadelphia. 1860 (?).

1866. Horse-training made easy. Being a new and practical system of teaching and educating the horse. Whip training, shoeing, diseases, etc. Robert Jennings. 186 pp. Ill. Philadelphia.

1868. The horse: how to feed him, avoid disease, and save money. George Armatage. 116 pp. London.

1870. American turf register and racing calendar. A correct synopsis of turf events in the United States and the Dominion of Canada, embracing running, trotting and pacing. With an appendix. 1870–72. New York. 3 vols.

1872. The Orange county stud book, giving a history of all noted stallions bred and raised in Orange county; together with symptoms and treatment of the diseases of the horse. J. H. Reeves. 156 pp. Unionville, N. Y.

1873. Rational horse-shoeing. Wildair. 49 pp. Ill. New York.

1874 (?). The trotting horse of America. How to train and drive him: with reminiscences of the trotting turf. Hiram Woodruff. Edited by Charles J. Foster. Nineteenth edition, revised and enlarged, with a new appendix and a copious index. 477 pp. Ill. Philadelphia.

1877. Famous horses of America. Containing fifty-nine portraits of the celebrities of the American turf, past and present, with short biographies. 79 pp. Porter & Coates. Philadelphia.

1882. The horse in motion, as shown by instantaneous photography, with a study on animal mechanics founded on anatomy and the relations of the camera, in which is demonstrated the theory of quadrupedal locomotion. J. D. B. Stillman. Executed and published under the auspices of Leland Stanford. 127 pp. 107 plates. Boston.

1885. The saddle-horse. A complete guide for riding and training. 95 pp. Ill. Orange Judd Company. New York.

1886. Horse and man; their mutual dependence and duties. Rev. J. G. Wood. 339 pp. Ill. Philadelphia.

The Percheron horse in America. M. C. Weld. In France by Charles du Haÿs. 142 pp Ill. New York.

1887. Russell on scientific horseshoeing for the different diseases of the foot. Revised and enlarged, with 104 illustrations. William Russell. 211 pp. Cincinnati.

1888. Horse-breeding; being the general principles of heredity applied to the business of breeding horses, with instructions for the management of stallions, brood mares and young foals, and the selection of breeding stock. J. H. Sanders. Seventh edition, with appendix. 275 pp Ill. Chicago.

The art of taming and educating the horse, etc., the simplest, most humane and effective in the world; with details of management in the subjection of over forty representative vicious horses, and the story of the author's personal experience, etc. D. Magner. 1112 pp. 944 ill. Battle Creek, Mich.

1892. The exterior of the horse. Armand Goubaux and Gustave Barrier. Second edition, with 346 figures and 34 plates, by G. Nicolet. Translated and edited by Simon J. J. Harger. 916 pp. Philadelphia and London.

The horse. A study in natural history. William Henry Flower. 204 pp. Ill. New York.

The farrier or 'no foot, no horse.' With some description of the anatomy of the horse's foot, and how to shoe and preserve it in health. A. T. Fisher. 170 pp. London.

The horse; its varieties and management in health and disease. George Armatage. Revised and enlarged. 272 pp. Ill. London and New York.

1894. Horse-breeding for farmers. Alfred E. Pease. 133 pp. London and New York.

1897 (?). Horse-keeping for amateurs: a practical manual on the management of horses, for the guidance of those who keep them for their personal use. Fox Russell. 72 pp. London.

Black Beauty: his grooms and companions. A. Sewell. 245 pp. Ill. Boston. Not dated.

Pamphlets.

The horse's foot, and how to keep it sound. William Miles. From the third London edition. 70 pp. Ill. New York and Philadelphia. 1847.

Horses; their varieties, breeding and management in health and disease. H. D. Richardson. 72 pp. Ill. New York. 1858.

Horseshoeing. William Miles. 27 pp. Ill. Boston. 1858.

Special report on the market for American horses in foreign countries. Secretary James Wilson. 94 pp. Ill. Washington. 1898.

The Mule.

1867. The mule. A treatise on the breeding, training and uses to which he may be put. Harvey Riley. 107 pp. Ill. New York.

CLASS IV., SECTION 7.—DOGS.

1857 (?). Breeding, training, management, diseases, etc., of dogs: together with an easy and agreeable method of instructing all breeds of dogs in a great variety of amusing and useful performances. Francis Butler. Fifth edition, revised and enlarged, with an appendix. 406 pp. Ill. Brooklyn.

1884. The management and diseases of the dog. John Woodroffe Hill. 383 pp. Ill. New York.

1887. The dogs of Great Britain, America and other countries. Their breeding, training and management in health and disease. Comprising all the essential parts of the two standard works on the dog by Stonehenge, together with chapters by American writers. New and enlarged edition. 460 pp. Ill. New York.

Hints on dog breaking. William Floyd. With an additional chapter by F. R. Bevan. 44 pp. Ill. New York.

1889. Hints about home and farm favourites. For pleasure, prizes and profit (cats, poultry, birds, rabbits, goats, monkeys and pets). Gordon Stables. 142 pp. London and New York.

1890. The friend of man; and his friends,—the poets. Frances Power Cobbe. Second edition, enlarged. 186 pp. London.

1893. Kennel secrets. How to breed, exhibit and manage dogs. By "Ashmont." 348 pp. Ill. Boston.

Not dated. Ladies' dogs, as companions: also a guide to their management in health and disease; with many stories, humorous and pathetic, painted from life. Gordon Stables. 304 pp. Ill. London.

Dogs in their relation to the public (social, sanitary and legal). Gordon Stables. 64 pp. London, Paris and New York.

The dog. William Youatt. Edited, with additions, by E. J. Lewis. 403 pp. Ill. Philadelphia.

Pamphlets.

Points for judging the different varieties of dogs. William M. Tileston. 52 pp. New York. 1878.

First lessons in dog training; with standards and points of judging for all breeds of dogs. New and enlarged edition. 107 pp. New York. 1888.

CLASS IV., SECTION 8.—CATS, RABBITS, ETC.

1893. Domestic or fancy cats: a practical treatise on their antiquity, domestication, varieties, breeding, management, diseases, exhibition and judging. John Jennings. 123 pp. Ill. London.

The wild rabbit in a new aspect or rabbit-warrens that pay. A record of recent experiments conducted on the estate of the Right Hon. the Earl of Wharncliffe at Wortley Hall. J. Simpson. 135 pp. Edinburgh and London.

1895. The cat. A guide to the classification and varieties of cats, and a short treatise upon their care, diseases and treatment. Rush Shippen Huidekoper. 148 pp. Ill. New York.

The varying hare, or white rabbit. B. H. Warren. 5 pp. 2 colored plates. Harrisburg, Pa. 1895. Pamphlet.

CLASS IV, SECTION 9.—POULTRY (AVICULTURE).

1750. The art of hatching and bringing up domestick fowls of all kinds, at any time of the year. Either by means of the heat of hot-beds, or that of common fire. M. de Reaumur. 470 pp. Ill. London.

1843. The American poultry book; being a practical treatise on the management of domestic poultry. Micajah R. Cock. 179 pp. Ill. New York.

1857. The American poultry yard; comprising the origin, history and description of the different breeds of domestic poultry, etc. D. J. Browne. With an appendix embracing the comparative merits of different breeds of fowls, by Samuel Allen. 322 pp. Ill. New York.

1865. The poultry yard: comprising the management of fowls, for use and exhibition. Edited by E. Watts. A new edition, with illustrations by Harrison Weir. 172 pp. London and New York.

1867. Geyelin's poultry breeding, in a commercial point of view, as carried out by the National poultry company (limited), Bromley, Kent. Natural and artificial hatching, rearing and fattening, etc.,

and a notice of the poultry establishments in France. Geo. Kennedy Geyelin. With a preface by Charles L. Flint. 127 pp. Ill. Boston.

The poultry book: comprising the breeding and management of profitable and ornamental poultry, their qualities and characteristics; to which is added "the standard of excellence in exhibition birds," authorized by the poultry club. W. B. Tegetmeier. With coloured illustrations by Harrison Weir. 356 pp. London and New York.

1887. Poultry culture. How to raise, manage, mate and judge thoroughbred fowls. I. K. Felch. 438 pp. Ill. Chicago.

1888. The American standard of perfection as adopted by the American poultry association, etc., containing a complete description of all the recognized varieties of fowls. Edited by Harmon S. Babcock. 244 pp. Ill. Buffalo, N. Y.

1892. Poultry keeping as an industry for farmers and cottagers. Edward Brown. Illustrated by Ludlow. Second edition. 157 pp. London.

New-laid eggs. Hints for amateur poultry rearers. Mrs. de Salis. 101 pp. Ill. London and New York.

Pigeon-keeping for amateurs: a complete guide to the amateur breeder of domestic and fancy pigeons. James C. Lyell. 135 pp. Ill. London.

Pamphlets.

The American poultry guide, containing a full description of all pure-bred poultry. E. A. Wendell. 80 pp. Ill. Albany. 1866.

Natural and artificial duck-culture. James Rankin. 95 pp. Ill. Boston. 1889.

Also "The Farm — Poultry." Semi-monthly. Vol. 9 (1898). Boston. Unbound.

CLASS V., SECTION 1. — CHEMISTRY.

1815. Elements of agricultural chemistry, in a course of lectures for the board of agriculture. Sir Humphry Davy. 332 pp. New York and Boston. This book also contains an account of the results of experiments on the produce and nutritive qualities of different grasses, and other plants, used as food of animals. Instituted by John, Duke of Bedford. 74 pp. Ditto. Second American edition. 304 pp. Hartford, Conn. 1819. Ditto. The sixth edition. 422 pp. Ill. London. 1839.

1823. Chimie appliquée a l'agriculture. M. le Comte Chaptal. 2 vols. 782 pp. Paris.

1826. Materia Indica; or, some account of those articles which are employed by the Hindoos, and other eastern nations, in their medicine, arts, and agriculture; etc. Whitelaw Ainslie. 2 vols. 1258 pp. London.

A practical treatise on poisons and asphyxies, adapted to general use, etc. M. P. Orfila. Translated from the French, with notes and additions, by J. G. Stevenson. With an appendix. 240 pp. Boston.

1830. The chemistry of the arts; being a practical display of the arts and manufactures which depend on chemical principles. On the

basis of Gray's operative chemist, adapted to the United States; with treatises on calico printing, bleaching, and other large additions. Arthur L. Porter. 2 vols. 803 pp. Ill. Philadelphia.

1836. Chemistry for beginners: designed for common schools, and the younger pupils of higher schools and academies. Mrs. A. H. Lincoln Phelps. 216 pp. Ill. New York.

1838. Chemistry of organic bodies. Vegetables. Thomas Thomson. 1076 pp. London, Paris, Leipsig, Edinburgh, Glasgow and Dublin.

1842. A popular treatise on agricultural chemistry: intended for the use of the practical farmer. Charles Squarey. 156 pp. London.

1843. Chemistry of animal bodies. Thomas Thomson. 702 pp. Edinburgh and London.

Chemistry in its application to agriculture and physiology. Justus Liebig. Edited from the manuscript of the author by Lyon Playfair. From the last London edition, much improved. 135 pp. Philadelphia and New York. Fourth edition, revised and enlarged, by Lyon Playfair and William Gregory. 418 pp. London. 1847.

1845. Animal chemistry, or organic chemistry in its application to physiology and pathology. Justus Liebig. Edited from the author's manuscript, by William Gregory. 111 pp. Philadelphia and New York. Second edition, with additions, notes and corrections, by Dr. Gregory, and others by John W. Webster, M.D. 347 pp. Cambridge, Mass., Boston, New York, Philadelphia and Baltimore. 1843.

Manual of agricultural analysis. John Mitchell. 140 pp. Ill. London.

Rural economy, in its relations with chemistry, physics, and meteorology; or, chemistry applied to agriculture. J. B. Boussingault. Translated, with an introduction and notes, by George Law. 507 pp. New York and Philadelphia.

1846. Chemistry made easy, for the use of agriculturists. John Topham. Third edition. 112 pp. London.

1847. Lectures on agricultural chemistry and geology. James F. W. Johnston. Second edition. 1117 pp. Edinburgh and London. Fifth edition, with an appendix. 708 pp. New York and London. 1849.

1849. The farmer's and gardener's guide to the analysis of soils and manures; and to the practical application of agricultural chemistry. John Martindale. 137 pp. Ill. London.

1852. Rural chemistry: an elementary introduction to the study of the science in its relation to agriculture and the arts of life. Edward Solly. First American from the third English edition, revised and enlarged. 391 pp. Philadelphia.

1853. The farmer's manual of agricultural chemistry, with instructions respecting the diseases of cereals, and the destruction of the insects which are injurious to those plants. A. Normandy. 218 pp. Ill. London.

Chemical field lectures for agriculturists. Julius Adolphus Stöckhardt. Translated from the German. Edited, with notes, by James E. Teschemacher. 242 pp. Cambridge, Mass.

1855. Principles of agricultural chemistry, with special reference to the late researches made in England. Justus von Liebig. 105 pp. New York.

1856. The farmer's lighthouse. Chemistry applied to agriculture, the only profitable mode of tilling the soil. J. E. Kent. 108 pp. Ill. Boston.

Catechism of agricultural chemistry and geology. James F. W. Johnston. With an introduction by John Pitkin Norton. Stereotyped from the eighth London edition. 80 pp. Ill. New York.

1867. Chemistry of the farm and the sea. With other familiar chemical essays. Jas. R. Nichols. 123 pp. Boston.

1868 (?). How crops grow. A treatise on the chemical composition, structure, and life of the plant, for all students of agriculture. Samuel W. Johnson. 394 pp. Ill. New York. Revised and enlarged edition. 416 pp. New York. 1894.

1877. Praktische Düngerlehre mit einer Einleitung über die allgemeinen Yährstoffe des Pflanzen und die Eigenschaften des Kusturbodens. Gemeinveiständlicher leitfaden der Agrikultur-Chemie. Emil Wolff. Siebente verbesserte auflage. 184 pp. Berlin.

1878. The organic constituents of plants and vegetable substances and their chemical analysis. G. C. Wittstein. Authorized translation from the German original, enlarged with numerous editions. Baron Ferd. von Mueller. 332 pp. Melbourne.

1887. A treatise on chemistry. Sir H. E. Roscoe and C. Schorlemmer. Vol. I. The non-metallic elements. 888 pp. Ill. New York. 1898. Vol. II. The metals. 1192 pp. Ill. New York. 1898. Vol. III. The chemistry of the hydrocarbons and their derivatives, or organic chemistry. Part I. 724 pp. Ill. 1888. Part II. 655 pp. Ill. 1887. Part III. 388 pp. Ill. 1897. Part IV. 544 pp. 1896. Part V. 523 pp. 1895. Part VI. 582 pp. 1892. New York. 8 vols.

1888. The chemistry of the farm. R. Warington. 120 pp. New York.

Chemistry inorganic and organic with experiments. Charles Loudon Bloxam. Sixth edition. 788 pp. Ill. London.

1893. The food of plants. An introduction to agricultural chemistry. A. P. Laurie. 77 pp. Ill. London and New York.

Pamphlets.

Analyses of grains and vegetables, — also, on ammonia found in glaciers; and on the action and ingredients of manures. E. N. Horsford. 68 pp. Boston. 1846.

Annual report of the superintendent of the Onondaga salt springs of the state of New York. 1858, 1878. Albany.

First annual report of Prof. S. W. Johnson, chemist to the Connecticut state agricultural society, and professor of analytical and agricultural chemistry in Yale College. 58 pp. Hartford. 1858.

First and second annual reports of Philip T. Tyson, state agricultural chemist, to the house of delegates of Maryland 1860, 1862. Annapolis.

Principles and practice of agricultural analysis. Harvey W. Wiley. Contained in "The chemical library." Vol. I., Nos. 10, 12; Vol. II., Nos. 3, 6; Vol. III., Nos. 7, 11 (from December, 1894, to June, 1896). Easton, Pa Volumes incomplete and unbound.

Chemical survey of the water supplies of Illinois. Arthur William Palmer. 98 pp. Ill. Champaign, Ill. 1897.

CLASS V., SECTION 2.— GEOLOGY, MINERALOGY, SOILS.

1839 (?). The nature and property of soils, etc. pp. 1-240. Reports on Whitfield Farm. pp. 241-310, 377-432. Letter to the tenants of Philip Pusey. pp. 311-338. The mode of cultivation, adopted on Stinchcombe farm by Mr. Dimmery. pp. 339-374. John Morton. London. Fourth edition, enlarged. 1839-1842.

1855. American geology, containing a statement of the principles of the science, with full illustrations of the characteristic American fossils. With an atlas and a geological map of the United States. Ebenezer Emmons. Vol. I. 251 pp. Ill. 18 plates. Albany.

1866. Elements of geology; or, the ancient changes of the earth and its inhabitants as illustrated by geological monuments. Sir Charles Lyell, Bart. Sixth edition, greatly enlarged, and illustrated with 770 woodcuts. 803 pp. New York.

1888. Rocks and soils: their origin, composition and characteristics; chemical, geological and agricultural. Horace Edward Stockbridge. 239 pp. Ill. New York.

How crops feed. A treatise on the atmosphere and the soil, as related to the nutrition of agricultural plants. Samuel W. Johnson. 375 pp. Ill. New York.

1890. Aspects of the earth. A popular account of some familiar geological phenomena. N. S. Shaler. 344 pp. New York.

Soils and their properties. W. Fream. 176 pp. Ill. London.

1892. A guide to the scientific examination of soils: comprising select methods of mechanical and chemical analysis and physical investigation. Translated from the German of Dr. Felix Wahnschaffe, with additions by William T. Brannt. 177 pp. Ill. Philadelphia.

1893. The soil in relation to health. H. A. Miers and R. Crosskey. 135 pp. Ill. London and New York.

1894. Sea and land. Features of coasts and oceans with special reference to the life of man. N. S. Shaler. 252 pp. Ill. New York.

1895. The soil: its nature, relations, and fundamental principles of management. F. H. King. 303 pp. Ill. New York and London.

1897. A treatise on rocks, rock-weathering and soils. George P. Merrill. 411 pp. Ill. New York and London.

The soils of Tennessee. Chas. F. Vanderford. 139 pp. Ill., maps. Knoxville.

Pamphlets.

Instructions for the analysis of soils. James F. W. Johnston. 22 pp. Edinburgh and London. 1847.

Solidification of the coral reefs of Florida, and source of lime in the growth of corals. E. N. Horsford. 11 pp. Boston. 1853.

Report on the Goderich salt region. T. Sterry Hunt. 36 pp. Montreal. 1870.

Report on the Queensland tin field. Walter C. Hume. 31 pp. Map. 1874.

Report of commission appointed to investigate the waste of coal mining, with the view to the utilizing of the waste. 183 pp. Maps. Philadelphia. 1893.

Bulletin of the United States geological survey. No. 116. A geographic dictionary of Massachusetts. 126 pp. Washington. 1894.

Geological Reports.

New Hampshire.—Final report on the geology and mineralogy of the state of New Hampshire; with contributions towards the improvement of agriculture and metallurgy. Charles T. Jackson. 376 pp. Ill. Concord. 1844.

Vermont.—Report on the geology of Vermont: descriptive, theoretical, economical and scenographical. Edward Hitchcock, Edward Hitchcock, Jr., Albert D. Hager, Charles H. Hitchcock. Published under the authority of the state legislature, by Albert D. Hager. 988 pp. Ill. 38 plates. Maps. Claremont, N. H. 1861. 2 vols.

Massachusetts—Final report on the geology of Massachusetts. Vol. I., containing I. Economical geology; II., Scenographical geology. Edward Hitchcock. 831 pp. Ill. 51 plates. Maps. Northampton. 1841.

Monographs of the United States geological survey. Vol. XXIII. Green mountains of Massachusetts. Raphael Pumpelly, J. E. Wolff, T. Nelson Dale. 206 pp. Ill. 23 plates. Washington. 1894.

New York.—Natural history of New York. Part III. Mineralogy of New-York; comprising detailed descriptions of the minerals hitherto found in the state of New-York, and notices of their uses in the arts and agriculture. Lewis C. Beck. 536 pp. Ill. 8 plates. New York, Boston and Albany. 1842.

Natural history of New York. Part IV. Geology of New-York. Part I. Comprising the geology of the first geological district. William W. Mather. 653 pp. 46 plates. New York, Boston and Albany. 1843. Part II. Comprising the survey of the second geological district. Ebenezer Emmons. 437 pp. Ill. 17 plates. New York, Boston and Albany. 1842. Part III. Comprising the survey of the third geological district. Lardner Vanuxem. 306 pp. Ill. New York, Boston and Albany. 1842. Part IV. Comprising the survey of the fourth geological district. James Hall. 683 pp. Ill. 74 tables organic remains. 19 plates. New York, Boston and Albany. 1843.

Louisiana.—Geology and agriculture. Part I. A preliminary report upon the hills of Louisiana, north of Vicksburg, Shreveport and Pacific Railroad. Otto Lerch. 52 pp. Ill. Baton Rouge. 1892. Pamphlet.

Indiana.—Seventh annual report of the geological survey of Indiana, made during the year 1875. E. T. Cox, assisted by John Collett,

W. W. Borden and G. M. Levette. 601 pp. 2 plates. Maps. Indianapolis. 1876. Also portfolio containing maps and colored section referred to in the report of state geologist of Indiana, 1869.

Michigan. — First biennial report of the progress of the geological survey of Michigan, embracing observations on the geology, zoölogy and botany of the lower peninsula. A. Winchell. 339 pp. Lansing. 1861.

Wisconsin, Iowa and Minnesota. — Report of a geological survey of Wisconsin, Iowa, and Minnesota; and incidentally of a portion of Nebraska Territory. Made under instructions from the United States treasury department. David Dale Owen. 638 pp. Ill. 15 plates. Maps. Philadelphia. 1852.

CLASS V., SECTION 3. — NATURAL HISTORY, ZOOLOGY.

1835. Catalogue of the animals and plants of Massachusetts. Edward Hitchcock. 142 pp. Amherst, Mass.

1838. A manual of conchology, according to the system laid down by Lamarck, with the late improvements by De Blainville. Exemplified and arranged for the use of students. Thomas Wyatt. 191 pp. 36 colored plates. New York.

1841. Report on the invertebrata of Massachusetts, comprising the mollusca, crustacea, annelida, and radiata. Augustus A. Gould. 373 pp. Ill. Cambridge, Mass.

1842. Natural history of New York. Introduction, 188 pp. 2 plates. Zoology of New-York, or the New-York fauna; etc. James E. DeKay. Part I. Mamalia. 146 pp. 33 plates, mostly colored. Albany.

The book of the seasons; or, the calendar of nature. William Howitt. 341 pp. From the sixth London edition Philadelphia.

1843. Natural history of New York. Zoology of New-York, etc. James E. DeKay. Part V. Mollusca. 271 pp. 40 colored plates. Albany. Part VI. Crustacea. 70 pp. 13 colored plates. Albany. 1844. 1 vol.

1845. Reports on the progress of zoology and botany. 1841, 1842. 471 pp. The Ray Society. Edinburgh.

1847. Pests of the farm, with instructions for their extirpation: being a manual of plain directions for the certain destruction of every description of vermin. H. D. Richardson. 108 pp. Ill. Dublin, London and Edinburgh.

Natural history of New York. Palæontology of New-York. Vol. I. Containing descriptions of the organic remains of the lower division of the New-York system. James Hall. 338 pp. 87 plates. Albany. Vol. II. Containing descriptions of the organic remains of the lower middle division of the New-York system. James Hall. 362 pp. 85 plates. Albany. 1852.

1853. Natural history of Vermont, with numerous engravings, and an appendix. Zadock Thompson. 287 pp. Ill. Map. Burlington.

1856. Narrative of the expedition of an American squadron to the

China Seas and Japan, performed in the years 1852, 1853 and 1854, under the command of Commodore M. C. Perry. Vol. II. 414 pp. Ill. Maps and charts. Washington.

1857. Reports of explorations and surveys, to ascertain the most practicable and economical route for a railroad from the Mississippi river to the Pacific ocean. 1853-56. Vol. VIII. General report upon the Zoology of the several Pacific railroad routes. 757 pp. Plates XVII.-LX. Washington.

Report on the United States and Mexican boundary survey. William H. Emory. Vol. I., Part I. Description of the country. 258 pp. Ill. Charts and maps. Part II. Geological reports of C. C. Parry and Arthur Schott. Paleontology and geology of the boundary, by James Hall. Description of cretaceous and tertiary fossils by T. A. Conrad. 174 pp. 21 plates. Washington.

1859. Illustrated natural history of the animal kingdom, being a systematic and popular description of the habits, structure, and classification of animals, etc. S. G. Goodrich. 1360 pp. 1400 engravings. New York. 2 vols.

1864. Our garden friends and foes. Rev. J. G. Wood. 438 pp. Ill. 8 plates. London and New York.

1865. Supplement to the Ichnology of New England. A report to the government of Massachusetts, in 1863. Edward Hitchcock. 96 pp. 20 plates. Boston.

1882. The garden, the woods, and the fields; or, the teachings of nature as seasons change. 503 pp. London, Edinburgh and New York.

1888. By-paths of Bible knowledge. XI. Scripture natural history. II. The animals mentioned in the Bible. Henry Chichester Hart. 240 pp. Ill. London.

1893. American types of animal life. St. George Mivart. 374 pp. Ill. Boston.

1895. Domesticated animals. Their relation to man and to his advancement in civilization. Nathaniel Southgate Shaler. 267 pp. Ill. New York.

Hidden beauties of nature. Richard Kerr. 256 pp. Ill. London.

1896. Life in ponds and streams. W. Furneaux. 406 pp. 8 colored plates. 311 figs. London, New York and Bombay.

1897. Ferrets. Their management in health and disease, with remarks on their legal status. Nicholas Everitt. 209 pp. Ill. London.

The vertebrate skeleton. Sidney H. Reynolds. 559 pp. Ill. Cambridge, Mass.

In brook and bayou or, life in still waters. Clara Kern Bayliss. 180 pp. Ill. New York.

Taxidermy and zoological collecting. A complete handbook for the amateur taxidermist, collector, osteologist, museum-builder, sportsman and traveller. William T. Hornaday. With chapters on collecting and preserving insects, by W. J. Holland. Illustrated by Charles Bradford Hudson and other artists. Sixth edition. 362 pp. Ill. New York.

With rod and gun in New England and the Maritime Provinces. Edward A. Samuels. With valuable supplementary chapters by prominent sportsmen. 540 pp. Ill. Boston.

1898. Familiar life in field and forest. The animals, birds, frogs and salamanders. F. Schuyler Mathews. 284 pp. Ill New York.

Nature studies. C. J. Maynard. No. II. Province II. Sponges, Poriferæ. 133 pp. 4 colored plates. West Newton, Mass.

Elementary zoology. Frank E. Beddard. 208 pp. Ill. New York, London and Bombay.

1899. The foundations of zoölogy. William Keith Brooks. 339 pp. New York and London.

Not dated. Popular natural history, or the characteristics of animals portrayed in a series of illustrative anecdotes. Thos. Brown. Several colored plates. London, Edinburgh and Dublin. 3 vols.

The pictorial museum of animated nature. Volume I. Mammalia. Birds. 399 pp. Ill. London. Vol. II. Birds. Reptiles. Mollusca. Insects. 432 pp. Ill. London.

The complete vermin destroyer; or, gamekeeper's directory, housekeeper's and warehouseman's friend, and farmer's and shepherd's guide. T. B. Johnson. 208 pp. Ill. Liverpool, Eng.

Practical taxidermy: a manual of instruction to the amateur in collecting, preserving, and setting up natural history specimens of all kinds. To which is added a chapter upon the pictorial arrangement of museums. Montagu Browne. Second edition, revised and considerably enlarged, with additional instructions in modelling and artistic taxidermy. 354 pp. Ill. London.

Promenades au Jardin des Plantes Par MM. Louis Rousseau, et Céran Lemonnier. 519 pp. Paris.

The foundation of the Massachusetts professorship of natural history, at Harvard College, in Cambridge, with documents, relative to its establishment. 21 pp. Boston. 1805. Pamphlet.

Sample copies of "The naturalists' journal: and naturalists' guide," and of "The naturalist and collector."

Natural History Societies.

Boston.— Proceedings of the Boston society of natural history. Vols. XXV.-XXVII. (1890-97). Ill. 3 vols. Vols. XXIII., XXIV. and XXVIII. incomplete and unbound. Boston.

New York.— Bulletin of the American museum of natural history. Vols. I.-X (1881-98). Ill. 10 vols. New York.

Cincinnati.— The Journal of the Cincinnati society of natural history. Vols. XV.-XIX. (XV. and XVIII. incomplete). 1892-98. Ill. Cincinnati, Ohio. Unbound.

CLASS V., SECTION 4. — BIOLOGY, EVOLUTION, ETC.

1872. Instinct: its office in the animal kingdom, and its relation to the higher powers in man. P. A. Chadbourne. 307 pp. New York.

1889. General biology. Part I. Introductory. William T. Sedgwick and Edmund B. Wilson. 193 pp. Ill. New York.

1894. Evolution of to-day. A summary of the theory of evolution as held by scientists at the present time, and an account of the progress made by the discussions and investigations of a quarter of a century. H. W. Conn. 342 pp. New York and London.

1895. The sexuality of nature: an essay proposing to show that sex and the marriage union are universal principles, fundamental alike in physics, physiology and psychology. Leopold Hartley Grindon. Second American edition. 124 pp. Boston.

1897. The development of the frog's egg. An introduction to experimental embryology. Thomas Hunt Morgan. 192 pp. Ill. New York and London.

1898. Schenk's theory. The determination of sex. Leopold Schenk. Authorized translation. 222 pp. Chicago, Akron and New York.

On spontaneous generation. Milne Edwards. 10 pp. From American journal of science and arts. Vol. XXVII. March, 1859. Pamphlet.

CLASS V., SECTION 5.—INSECTS AND INSECTICIDES (ENTOMOLOGY).*

1770. Illustrations of natural history. Wherein are exhibited upwards of six hundred and sixty figures of exotic insects, according to their different genera; etc. D. Drury. To which is added a translation into French. 3 vols. 296 pp. 150 colored plates. London. 1770. 1773, 1782.

1824. American entomology, or descriptions of the insects of North America. Illustrated by coloured figures from original drawings executed from nature. Thomas Say. Unpaged. 54 colored plates. Philadelphia.

1828. Letter from the secretary of the treasury in relation to the growth and manufacture of silk. 220 pp. Ill. This volume also contains "A treatise on the culture of silk in Germany, and especially in Bavaria, etc.," by the Counsellor of State De Hazzi. With plates, etc. 108 pp. Washington.

1830. The library of entertaining knowledge. Insect architecture. 420 pp. Ill. London, Edinburgh, Glasgow, Dublin, Liverpool and Leeds.

Ditto. Insect transformations. 420 pp. Ill.

1831. Ditto. Insect miscellanies. 414 pp. Ill.

1837. Résumé des principaux traités Chinois sur la culture des muriers et l'éducation des vers a soie. Traduit par Stanislas Julien. 224 pp. Ill. Paris.

1839. An introduction to the modern classification of insects; founded on the natural habits and corresponding organisation of the different families. J. O. Westwood. 2 vols. 1049 pp. Ill. London. 1839, 1840. Vol. 2 contains also a synopsis of the genera of British insects. 158 pp.

1840. A treatise on insects injurious to gardeners, foresters, and farmers. Vincent Köllar. Translated from the German, and illustrated by

* See Class V., Section 9.

engravings, by J. and M. Loudon. With notes, by J. O. Westwood. 377 pp. Ill. London.

1841. A report on the insects of Massachusetts, injurious to vegetation. Thaddeus William Harris. 456 pp. Cambridge, Mass. 1841. Second edition, entitled "A treatise on some of the insects of New England which are injurious to vegetation." 513 pp. Boston. 1852. Third edition, entitled "A treatise on some of the insects injurious to vegetation." 640 pp. 8 colored plates and 278 figs. Boston. 1862.

1850. Écoliers et vers a soie, ou La Petite Magnanerie du Père Toussaint. Par Louis Leclerc. 272 pp. Ill. Paris.

1854. Natural history of New York. Vol. V. Agriculture of New-York: — with descriptions of the more common and injurious species of insects. E. Emmons. 272 pp. 47 colored plates. Albany.

1856. British butterflies and their transformations. Arranged and illustrated in a series of plates by H. N. Humphreys. With characters and descriptions by J. O. Westwood. Third edition. 137 pp. 42 colored plates. London.

1857. British moths and their transformations. Arranged and illustrated as in "British butterflies" above. New edition, revised and corrected by the author. 2 vols. 536 pp. 124 colored plates. London.

An introduction to entomology; or, elements of the natural history of insects: comprising an account of noxious and useful insects, etc. William Kirby and William Spence. Seventh edition (fifth thousand). 607 pp. London.

Essay on the insects and diseases injurious to the wheat crops. H. Y. Hind. 139 pp. Ill. Toronto, Can.

1859. The life of North American insects. B. Jaeger, assisted by H. C. Preston. 319 pp. Ill. New York.

The complete writings of Thomas Say on the entomology of North America. Edited by John L. LeConte, with a memoir of the author, by George Ord. 2 vols. 1226 pp. 54 colored plates. New York, London, Paris and Madrid.

1860. Farm-insects: being the natural history and economy of the insects injurious to the field crops of Great Britain and Ireland, and also those which infest barns and granaries. With suggestions for their destruction. John Curtis. 528 pp. Ill. 17 colored plates. Glasgow, Edinburgh and London.

1865. A treatise on the insect enemies of fruit and fruit trees. With numerous illustrations from nature, by Hochstein, under the immediate supervision of the author. Isaac P. Trimble. The curculio and the apple moth. 139 pp. 11 plates. New York.

1873 (?). Our common insects. A popular account of the insects of our fields, forests, gardens and houses. Illustrated with 4 plates and 268 woodcuts. A. S. Packard, Jr. 225 pp. Boston.

1874 (?). Insects abroad. Being a popular account of foreign insects, their structure, habits, and transformations. Rev. J. G. Wood. 780 pp. Ill. New York.

1886. The butterflies of the eastern United States. For the use of classes in zoology and private students. G. H. French. 402 pp. Ill. Philadelphia.

1887. Injurious insects of the farm and garden. With a chapter on beneficial insects. New, enlarged edition. Mary Treat. 296 pp. Ill. New York.

1889. Insects injurious to fruits. William Saunders. Second edition. 436 pp. Ill. Philadelphia and London.

1890. Among the moths and butterflies. A revised and enlarged edition of "Insect lives; or, born in prison." Julia P. Ballard. 237 pp. Ill. New York and London.

The structure and habits of spiders. J. H. Emerton. 118 pp. Ill. Boston.

A manual of injurious insects with methods of prevention and remedy for their attacks to food crops, forest trees, and fruit. To which is appended a short introduction to entomology. Compiled by Eleanor A. Ormerod. Second edition. 410 pp. Ill. London.

Dragon-flies *vs.* mosquitoes. Can the mosquito pest be mitigated? Studies in the life history of irritating insects, their natural enemies and artificial checks, by working entomologists. With an introduction by Robert H. Lamborn. 202 pp. 9 plates. New York.

1891. Insects and insecticides. A practical manual concerning noxious insects and the methods of preventing their injuries. Clarence M. Weed. 281 pp. Ill. Hanover, N. H.

1892. A text-book of agricultural entomology; being a guide to methods of insect life and means of prevention of insect ravage. For the use of agriculturists and agricultural students. Eleanor A. Ormerod Second edition. 238 pp. Ill. London.

1893. Our household insects. An account of the insect-pests found in dwelling-houses. Edward A. Butler. 344 pp. Ill. London and New York.

Romance of the insect world. L. N. Badenoch. With illustrations by Margaret J. D. Badenoch and others. 341 pp. New York and London.

Beetles, butterflies, moths, and other insects. A brief introduction to their collection and preservation. A. W. Kappel and W. Egmont Kirby. Second thousand. 182 pp. 12 colored plates. London, Paris and Melbourne.

1895. Frail children of the air. Excursions into the world of butterflies. Samuel Hubbard Scudder. 279 pp. Ill. Boston and New York.

The natural history of aquatic insects. L. C. Miall. With illustrations by A. R. Hammond. 395 pp. London and New York.

1896. The gypsy moth. A report of the work of destroying the insect in the Commonwealth of Massachusetts, together with an account of its history and habits both in Massachusetts and Europe. Edward H. Forbush and Charles H. Fernald. 595 pp. Ill. Boston.

The spraying of plants. A succinct account of the history, principles and practice of the application of liquids and powders to plants for

the purpose of destroying insects and fungi. E. G. Lodeman. With a preface by B. T. Galloway. 399 pp. Ill. New York and London.

Economic entomology for the farmer and fruit-grower, and for use as a text-book in agricultural schools and colleges. John B. Smith. 481 pp. Ill. Philadelphia.

1897. Life histories of American insects. Clarence Moores Weed. 272 pp. Ill. New York and London.

Farm and garden insects. William Somerville. 127 pp. Ill. London and New York.

Insect life. An introduction to nature-study and a guide for teachers, students, and others interested in out-of-door life. John Henry Comstock. 349 pp. Ill. New York.

The gypsy moth. Annual reports of the committee in charge of the work of extermination. 1891-97. Including also "The gipsy moth in America," by L. O. Howard. Ill. 1 vol.

1898. A text-book of entomology including the anatomy, physiology, embryology and metamorphoses of insects for use in agricultural and technical schools and colleges as well as by the working entomologist. Alpheus S. Packard. 729 pp. Ill. New York and London.

My studio neighbors. William Hamilton Gibson. 245 pp. Ill. New York and London.

The butterfly book. A popular guide to a knowledge of the butterflies of North America. W. J. Holland. 382 pp. 48 colored plates. New York.

1899. Every-day butterflies. A group of biographies by Samuel Hubbard Scudder. 391 pp. Boston and New York.

Our insect friends and foes. How to collect, preserve and study them. Belle S. Cragin. 377 pp. Ill. New York and London.

Not dated. Miscellaneous papers on entomological subjects. Ill. 1 vol. Le Règne Animal distribué d'après son organisation, pour servir de base a l'histoire naturelle des animaux, et d'introduction a l'anatomie comparée. Par Georges Cuvier. Edition accompagnée de planches gravées, etc. Vol. I. Les Insectes, avec un atlas, par MM. Audouin, Blanchard, Doyère, et Milne Edwards. Myriapodes, Thysanoures, Parasites. Suceurs et Coléoptères. Texte. 537 pp. Plates, 1-75, mostly colored. Vol. II. Orthoptères, Hémiptères. Néuroptères, Hyménoptères, Lépidoptères, Rhipiptères et Diptères. Texte. 443 pp. Colored plates, 76-182. Paris. 4 vols.

Pamphlets.

Potato pests. Being an illustrated account of the Colorado potato-beetle and other insect foes of the potato in North America. Charles V. Riley. 108 pp. Ill. New York. 1876 (?).

Essai sur les insectes et les maladies qui affectent le blé. Emilien Dupont. 38 pp. Montreal. 1857.

Silk farming. Ellen Call Long. 47 pp. Ill. Philadelphia. 1884 (?).

Spraying crops. Why, when, and how. Clarence M. Weed. Third (revised) edition. 132 pp. Ill. New York. 1895.

A preliminary list of the Hemiptera of Colorado. C. P. Gillette and Carl F. Baker. 137 pp. Ill. Fort Collins, Col. 1895.

Nematode parasites; their relation to man and domesticated animals. N. A. Cobb. 62 pp. Ill. Sydney, N. S. W. 1898.

Elm-leaf beetle in New York state. Ephraim Porter Felt. 43 pp. Ill. Albany. 1898.

The phylloxera or grapevine louse, and the remedies for its ravages. Eugene W. Hilgard. 25 pp. Ill. Berkeley, Cal.

Entomological Reports, etc.

New York. — First and second report on the noxious, beneficial and other insects, of the state of New-York. Asa Fitch. 336 pp. Ill. Albany. 1856.

Annual report on the injurious and other insects of the state of New York: first-twelfth (1881-96). J. A. Lintner. Albany. 8 vols. Ill. Also 13th (1897), J. A. Lintner, and 14th (1898), E. P. Felt. Pamphlets.

Illinois. — Annual report on the noxious insects of the state of Illinois: first (1867), Benj D. Walsh; third (1872), William LeBaron; seventeenth, eighteenth (1889-92), S. A. Forbes. Ill. Unbound.

Missouri. — Annual report on the noxious, beneficial and other insects of the state of Missouri;* second (1869), Charles V. Riley. Ill. Pamphlet.

Ontario. — Annual report of the Entomological society of Ontario: first-twenty-ninth (1870-98). Ill. Toronto. 3 vols. Second and third reports (1872, 1873), missing.

England. — Report of observations of injurious insects and common farm pests, with methods of prevention and remedy: first-twentieth (1877-96), Eleanor A. Ormerod. London. 3 vols. Ill. Second and fifth reports (1878, 1881) missing.

Queensland. — Report on insect and fungus pests. No. 1. Henry Tryon 238 pp. Ill. Brisbane. 1889.

"The Canadian entomologist." Edited by the Rev. C. J. S. Bethune. Vols. XXV.-XXX. (1893-98). London, Ont. 3 vols.

CLASS V., SECTION 6. — BIRDS (ORNITHOLOGY).

1831. The library of entertaining knowledge. The architecture of birds. 392 pp. Ill. London, Edinburgh, Glasgow, Dublin, Liverpool and Leeds.

1833. Ditto. The domestic habits of birds. 379 pp. Ill. London, Edinburgh, Glasgow, Dublin, Liverpool, Leeds and New York.

1835. Ditto. The faculties of birds. 338 pp. Ill. London.

1844. The birds of Long Island. J. P. Giraud, Jr. 397 pp. New York.

Natural history of New York. Zoology of New-York, or the New-York fauna. James E. De Kay. Part II. Birds. 380 pp. 141 colored plates. Albany.

---

* Included in annual report of the Missouri state board of agriculture. 1868-76.

The genera of birds: comprising their generic characters, a notice of the habits of each genus, and an extensive list of species referred to their several genera. George Robert Gray. Illustrated by David William Mitchell. 3 vols. 786 pp. 186 plates, mostly colored. London. 1844-49.

1858. Reports of explorations and surveys, to ascertain the most practicable and economical route for a railroad from the Mississippi river to the Pacific ocean. 1853-56. Vol. IX. Birds. Spencer F. Baird, John Cassin and George N. Lawrence. 1005 pp. Ill. Washington.

1866. Canary birds. A manual of useful and practical information for bird keepers. William Wood & Co. 110 pp. New York.

1870. The birds of New England. Edward A. Samuels. 591 pp. Ill. 8 colored plates. Boston.

1885 (?). The house sparrow: by an ornithologist, J. H. Gurney, Junr.; by a friend of the farmers, Colonel C. Russell; and the English sparrow in America, by Dr. Elliott Coues. 70 pp. Ill. London.

1890. Report on the birds of Pennsylvania. With special reference to the food-habits, based on over four thousand stomach examinations. B. H. Warren. Second edition, revised and augmented. Illustrated by 100 plates. 434 pp. Harrisburg.

1891. History of the birds of Kansas. N. S. Goss. 692 pp. 35 plates. Topeka.

A popular handbook of the ornithology of the United States and Canada. Based on Nuttall's manual. Montague Chamberlain. Vol I. Land birds. 473 pp. Ill. Vol. II. Game and water birds. 431 pp. Ill. Boston.

The birds of our rambles. A companion for the country. Charles Dixon. Illustrations by A. T. Elwes. 249 pp London.

1893. Jottings about birds. Charles Dixon. 239 pp. Coloured frontispiece by Smit. London.

1895. British birds. W. H. Hudson. With a chapter on structure and classification by Frank E. Beddard. 363 pp. 14 colored plates. 120 figs. London and New York.

Bird notes. By the late Jane Mary Hayward. Edited by Emma Hubbard. 181 pp. Ill. London and New York.

North American shore birds. A history of the snipes, sandpipers, plovers and their allies, etc. Daniel Giraud Elliot. 268 pp. 74 plates. New York.

Handbook of birds of eastern North America. Frank M. Chapman. 421 pp. Ill. New York.

The land-birds and game-birds of New England with descriptions of the birds, their nests and eggs, their habits and notes. H. D. Minot. Second edition edited by William Brewster. 492 pp. Ill. Boston and New York.

1896. The birds of eastern North America; with original descriptions of all the species which occur east of the Mississippi River, between the Arctic circle and the Gulf of Mexico, with full notes upon their

habits, etc. C. J. Maynard. Revised edition. 721 pp. 40 colored plates. Newtonville, Mass.

Handbook of the sparrows, finches, etc., of New England. C. J. Maynard. 94 pp. Ill. Newtonville, Mass.

The game birds of North America. A descriptive check-list. Frank A. Bates. 118 pp. Ill. Boston.

1897. The story of the birds. James Newton Baskett. 263 pp. Ill. New York.

Bird neighbors. An introductory acquaintance with one hundred and fifty birds commonly found in the gardens, meadows, and woods about our homes. Neltje Blanchan. With introduction by John Burroughs 234 pp. 50 colored plates. New York.

Bird-life. A guide to the study of our common birds. Frank M. Chapman. Illustrated by Ernest Seton Thompson. 269 pp. New York. 1897. Also edition with 75 colored plates. 195 pp. New York. 1898.

The gallinaceous game birds of North America, etc. Daniel Giraud Elliot 220 pp. 46 plates. New York.

Upon the tree-tops. Olive Thorne Miller. Illustrated by F. Carter Beard. 245 pp. Boston and New York.

1898. Birds of village and field. A bird book for beginners. Florence A. Merriam. 406 pp. Ill. Boston and New York.

The structure and classification of birds. Frank E. Beddard. 548 pp. Ill. London, New York and Bombay.

The wild fowl of the United States and British possessions or the swan, geese, ducks, and mergansers of North America, etc. Daniel Giraud Elliot. 316 pp. 63 plates. New York.

Popular parrakeets: their breeding and management by amateurs. W. T. Greene. 92 pp. Ill. London.

"The Iowa ornithologist" A quarterly magazine, devoted to ornithology and oology. Vols. I.–IV. (1894–98). Salem, Ia. 1 vol.

Pamphlets.

On the present status of Passer domesticus in America. Dr. Elliott Coues. 18 pp. Washington. 1879.

On the identity of the ascending process of the astragalus in birds with the intermedium. Edward S. Morse. 10 pp. Plate. Boston. 1880.

The birds of the Connecticut valley in Massachusetts. Wm. W. Colburn and Robert O. Morris. 24 pp. Springfield. 1891.

Birds of Michigan. A. J. Cook. 168 pp. Ill. Bulletin No. 94. Michigan agricultural experiment station. 1893.

How birds affect the farm and garden. Florence A. Merriam. 31 pp. Ill. New York. 1896 (?).

How to know the shore birds (Limicolæ) of North America (south of Greenland and Alaska). Charles B. Cory. 89 pp. Ill. Boston. 1897.

CLASS V., SECTION 7. — CLIMATE, WEATHER (METEOROLOGY).

1855. Results of a series of meteorological observations, made in obedience to instructions from the regents of the university, at sundry academies in the state of New-York, from 1826 to 1850 inclusive. Compiled by Franklin B. Hough. 502 pp. Map and plates. Albany.

1856. United States Japan expedition. Observations on the zodiacal light, with conclusions from the data thus obtained. Rev. George Jones. Vol. III. 705 pp. Ill. Washington.

The philosophy of the weather, and a guide to its changes. T. B. Butler. 414 pp. Ill. New York.

1857. Climatology of the United States, and of temperate latitudes of the North American continent, etc. Lorin Blodget. 536 pp. With isothermal and rain charts. Philadelphia and London.

1867. Sunshine and showers: their influences throughout creation. A compendium of popular meteorology. Andrew Steinmetz. 432 pp. Ill. London.

1879. Annual report of the chief signal officer of the army to the secretary of war. 1879, 1880, 1881, 1886, 1890. Washington. 6 vols.

Pamphlets.

An investigation of the sea breeze. W. M. Davis, L G. Schultz and R. DeC. Ward. pp. 215-263. Plates V.-XII. Annals of the astronomical observatory of Harvard college. Vol. XXI. Part II. Cambridge, Mass. 1890.

Climatology of North Carolina, from records of 1820 to 1892, including the fifth annual report of the North Carolina state weather service (1891), etc. 184 pp. Charts. Raleigh. 1892.

The climatology and physical features of Maryland. First biennial report of the Maryland state weather service for the years 1892 and 1893. 140 pp. Map and chart. Baltimore. 1894.

North Carolina weather, 1894, 1895, being the eight and ninth annual reports of the North Carolina state weather service. Raleigh. Unbound.

Augustana library publications, number 1. The mechanical composition of wind deposits. Johan August Udden. 69 pp. Ill. Rock Island, Ill. 1898.

Also sample copies of "The American meteorological journal." A monthly review of meteorology. Boston.

CLASS V., SECTION 8. — FISH AND FISH CULTURE (PISCICULTURE).

1839. Reports on the fishes, reptiles and birds of Massachusetts. Published agreeably to an order of the legislature, by the commissioners on the zoological and botanical survey of the state Birds by W. B. O. Peabody; fishes, etc., by D. H. Storer. 426 pp. Ill. Boston.

1842. Natural history of New York. Zoology of New-York, or the New-York fauna. James E. De Kay. Part III. Reptiles and Amphibia. 98 pp. 23 colored plates. Part IV. Fishes. 415 pp. 79 colored plates. Albany. 2 vols.

1857. A treatise on the artificial propagation of certain kinds of fish, with the description and habits of such kinds as are the most suitable for pisciculture. Theodatus Garlick. 142 pp. Ill. Cleveland, O.

1866. Annual report of the commissioners on inland fisheries: first-eighth (1866-73). Ill. Boston. 1 vol. Fifteenth, seventeenth, eighteenth, twentieth (1880, 1882, 1883, 1885): report of the commissioners on inland fisheries and game; 1887, 1888, 1891, 1892, 1894-97. Pub. Doc. No. 25. Boston. Unbound.

1879. United States commission of fish and fisheries. Part VII. Report of the commissioner for 1879. Spencer F. Baird. *A.* Inquiry into the decrease of food-fishes. *B.* The propagation of food-fishes in the waters of the United States. 846 pp. 46 plates. Washington. Ditto. Part XXIII. Report of the commissioner for the year ending June 30, 1897. John J. Brice. 340 pp. Ill. Washington. 2 vols.

1881. Bulletin of the United States fish commission. Vol. I. 1881. 466 pp. Ill. Washington.

1888. Home fishing and home waters. A practical treatise on fish culture, etc. Seth Green. 81 pp. New York.

1895. Fishes, living and fossil. An outline of their forms and probable relationships. Bashford Dean. 300 pp. Ill. New York and London.

Class V., Section 9.—Smithsonian Institution, etc., Reports.

Smithsonian Institution.

Annual report of the board of regents of the Smithsonian institution: 1855, 1856, 1859, 1860, 1863-70, 1872-75, 1878-97. Ill. Washington. 36 vols.

United States National Museum.

Report of the United States national museum: 1884, 1885, 1890, 1892-95. Ill. Washington. 7 vols.

Bulletins of the United States national museum.* No 38. Revision of the species of the genus Agrotis. John B. Smith. 237 pp. 5 plates. Washington. 1890. No. 44. Catalogue of the Lepidopterous superfamily Noctuidæ found in boreal America. John B. Smith. 424 pp. Washington. 1893. No. 45. Monograph of the North American Proctotrypidæ. William H. Ashmead. 472 pp. 18 plates. Washington. 1893. No. 46. The Myriapoda of North America. Charles Harvey Bollman. Edited by L. M. Underwood. 210 pp. Washington. 1893. No. 48. A revision of the Deltoid moths. John B. Smith. 129 pp. 14 plates. Washington. 1895. 5 vols.

Proceedings of the United States national museum.* Parts of volumes XVI.-XXI. inclusive, the most important being: A revision of the

* Largely entomological.

Orthopteran group Melanopli (Acridiidæ), with special reference to North American forms. Samuel Hubbard Scudder. Vol. XX., pp. 1-421, plates I.-XXVI., No. 1124. Washington. 1897.

A revision of the species of Acronycta (Ochsenheimer) and of certain allied genera. John B. Smith and Harrison G. Dyar. Vol. XXI., pages 1-194, plates I.-XXII., No. 1140. Washington. 1898.

Essex Institute.

Bulletin of the Essex institute: vols. I.-VIII., XIII.-XXX. (1869-76, 1881-98). Salem, Mass. 8 vols. Ill. Vols. IX.-XII. (1877-80) incomplete and unbound.

Royal Society of Canada.

Proceedings and transactions of the royal society of Canada. Vols. VI.-XII.* (1888-94). Second series. Vols. 1-3 (1895-97). Ill. Montreal and Ottawa. 10 vols.

Museu Nacional do Rio de Janeiro.

Archivos do Museu Nacional do Rio de Janeiro. Vols. VII., VIII. (1887-92). Ill. Rio de Janeiro. 1 vol.

Miscellaneous.

Annual report of the regents of the university of the state of New-York, on the condition of the state cabinet of natural history. Twentieth (1867). 410 pp. 23 plates. Albany.

CLASS VI., SECTION 1. — AGRICULTURE.

Massachusetts. — Statistical information relating to certain branches of industry in Massachusetts, for the year ending June 1, 1855. Francis DeWitt. 658 pp. Boston. 1856.

Ditto for the year ending May 1, 1865. Oliver Warner. 805 pp. Boston. 1866.

The census of Massachusetts. 1875. Volume III. Agricultural products and property. Carroll D. Wright. First edition. 790 pp. Boston. 1876.

Ditto. 1885. Horace G. Wadlin. 934 pp. Boston. 1887.

Ditto. 1895. Horace G. Wadlin. Vol. VI. Agriculture. Parts 1-3, pp. 203-534. Boston. 1898. Pamphlets.

Michigan. — Annual report of the secretary of state of the state of Michigan relating to farms and farm products. Twelfth-twentieth (1889-98). Lansing. 9 vols.

United States. — Agriculture of the United States in 1860; compiled from the original returns of the eighth census. Joseph C. G. Kennedy. 292 pp. Washington. 1864.

Statistics of agriculture. Ninth census. 1870. pp. 71-366. Washington. Not dated.

---

* Contains general index, vols. I.-XII.

Report on the productions of agriculture as returned at the tenth census (June 1, 1880), embracing general statistics and monographs on cereal production, flour-milling, tobacco culture, manufacture and movement of tobacco, meat production. 1149 pp. Charts and maps. Washington. 1883.

Report on the statistics of agriculture in the United States at the eleventh census. 1890. Statistics of agriculture, agriculture by irrigation, statistics of fisheries. 926 pp. Maps and charts. Washington. 1895.

Report on farms and homes: proprietorship and indebtedness in the United States at the eleventh census. 1890. George K. Holmes and John S. Lord. 646 pp. Washington. 1896.

A statistical view of American agriculture, its home resources and foreign markets, etc. John Jay. 81 pp. New York and London. 1859. Pamphlet.

Ontario.— Annual report of the bureau of industries for the Province of Ontario. 1893, 1896, 1897. Parts I., II. and III. Agricultural staistics. Part IV. Chattel mortgages. Toronto. Pamphlets.

France.— Notes économiques sur l'Administration des Richesses et la statistique agricole de la France. C. E. Royer. 471 pp. Paris. 1843.

Statistique agricole de la France. (Algérie et Colonies.) Résultats généraux de l'enquête décennale de 1882. Publiée par le Ministère de l'Agriculture. 744 pp. Nancy. 1887.

Album de statistique agricole. Résultats généraux de l'enquête décennale de 1882. 20 colored charts. Nancy. 1887.

Italy.— Annuario Statistico Italiano. 1886, 1889–90. Ministero di Agricoltura, Industria e Commercio. Roma. 2 vols.

Class VI., Section 2.— Manufactures.

The library of entertaining knowledge. Vegetable substances: materials of manufactures. 456 pp. Ill. London, Edinburgh, Glasgow, Dublin, Liverpool, Leeds and New York. 1833.

Manufactures of the United States in 1860; compiled from the original returns of the eighth census, under the direction of the secretary of the interior. 745 pp. Washington. 1865.

The census of Massachusetts. 1875. Vol. II. Manufactures and occupations First edition. Carroll D. Wright. 935 pp. Boston. 1877.

Ditto. 1885. Vol. II. Manufactures, the fisheries, and commerce. Horace G. Wadlin. 1543 pp. Boston. 1888.

Ditto. 1895. Vol. V. Manufactures. Horace G. Wadlin. 641 pp. Boston. 1898.

The annual statistics of manufactures. Horace G. Wadlin. Pub. Doc. No. 36. First–twelfth (1886-97). Boston. 11 vols.

Wool and manufactures of wool. Special report relating to the imports and exports of wool and its manufactures in the United States and the principal foreign countries; also its production, consumption, and manufacture; etc. Wm. F. Switzler. 231 pp. Treasury department. Washington. 1887.

Wool and manufactures of wool. Worthington C. Ford. 699 pp. Diagrams. Treasury department. Washington. 1894.

Report on manufacturing industries in the United States at the eleventh census. 1890. Part I. Totals for states and industries. 1002 pp. Part II. Statistics of cities. 827 pp. Part III. Selected industries. 725 pp. Washington. 1895. 3 vols.

Class VI, Section 3. — Labor.

Annual report of the bureau of statistics of labor. Pub. Doc. No. 31 (changed to 15): fifth, seventh, tenth, twelfth, thirteenth, sixteenth-eighteenth (1874, 1876, 1879, 1881, 1882, 1885-87). Carroll D. Wright. Nineteenth-twenty-eighth (1888-97). Horace G. Wadlin. Boston. 18 vols.

Annual report of the state board of arbitration and conciliation. Pub. Doc. No. 40. 1887, 1888, 1898. Boston. 3 vols. Also years 1890-97 unbound.

Report of the Massachusetts board to investigate the subject of the unemployed. Part I. Relief measures. Part II. Wayfarers and tramps. Part III. Public works. Part IV. Causes. Part V. Final report. 802 pp. Boston. 1895.

Annual report of the commissioner of labor: first-twelfth (1886-98). Carroll D. Wright. Washington. 14 vols.

Bulletin of the department of labor. Edited by Carroll D. Wright. Nos. 1-22 (November, 1895-May, 1899). Washington. Unbound.

United States consular reports. Labor in foreign countries. 1884. Vol. I. Labor in Europe. pp. 1-882. Vol. II. Ditto. pp. 883-1757. Vol. III. Labor in America, Asia, Africa, Australasia and Polynesia. 429 pp. Washington. 1885. 3 vols.

Reports of commissioners on the hours of labor. House, No. 44. 141 pp. Boston. 1867. Pamphlet.

Class VI., Section 4. — Transportation, Commerce.

Annual report of the board of railroad commissioners. Pub. Doc. No. 14. Thirteenth, nineteenth, twenty-first, twenty-second, twenty-fifth (1881, 1887, 1889, 1890, 1893). Boston. 5 vols.

Annual report of the Boston transit commission. Third, fourth (1897, 1898). Ill. Boston. 2 vols.

Annual report of the interstate commerce commission. Second-eighth (1888-94). Washington. 7 vols.

Annual report and statements of the chief of the bureau of statistics on the foreign commerce and navigation, immigration, and tonnage of the United States. 1881, 1883-88, 1890, 1891, 1894, 1896-98. Washington. 13 vols.

Report on the internal commerce of the United States. Part II. of Commerce and navigation. 1886, 1887, 1889, 1890. Washington. 4 vols.

Immigration and passenger movement at ports of the United States during the year ending June 30, 1894. 77 pp. Washington. 1895.

Commercial relations of the United States with foreign countries during

the years 1896 and 1897. Volume II. Europe. 1050 pp. Washington. 1898.

Review of the world's commerce during the year 1898. 187 pp. Washington. 1899.

Report on transportation business in the United States at the eleventh census: 1890. Henry C. Adams. Part I. Transportation by land. 867 pp. Maps. Washington. 1895. Part II. Transportation by water. 532 pp. Maps. Washington. 1894. 2 vols.

Hunt's merchants' magazine and commercial review. Vols. XXXI., XXXV., XXXVI., XXXVIII (1854-58). Freeman Hunt. New York. 4 vols.

Class VI., Section 5.—Finance.

Report of the auditor of accounts of the Commonwealth of Massachusetts. Pub. Doc. No. 6. 1873. 1883-98. Boston. 17 vols.

Report on wealth, debt and taxation at the eleventh census. 1890. Part I. Public debt. J. Kendrick Upton. 890 pp. Charts and diagrams. Washington. 1892.

Report on real estate mortgages in the United States at the eleventh census. 1890. George K. Holmes and John S. Lord. 943 pp. Charts and diagrams. Washington. 1895.

Class VI., Section 6.—Taxation, Revenue.

Report of the tax commissioner of the Commonwealth of Massachusetts. Pub. Doc. No 16. 1887. Boston.

Aggregates of polls, property, taxes, etc. Pub. Doc. No. 19. 1881-90. 1 vol. Boston. Also 1891-98. Unbound.

Report of the commission appointed to inquire into the expediency of revising and amending the laws of the Commonwealth relating to taxation. 322 pp. Boston. 1897.

Report of the commissioner of internal revenue. 1888-96. Washington. 9 vols.

Report on wealth, debt, and taxation at the eleventh census. 1890. Part II. Valuation and taxation. J. Kendrick Upton. 654 pp. Diagrams. Washington. 1895.

Class VI., Section 7.—Population, Social.

The census of Massachusetts. 1875. Vol. I. Population and social statistics. Carroll D. Wright. First edition. 866 pp. Boston. 1876.

Ditto. 1885. Carroll D. Wright. Part I. 776 pp. Boston. 1887; Part II. 1462 pp. Boston. 1888.

Ditto. 1895. Horace G. Wadlin. Vol. I. 878 pp. Boston. 1896; Vol. II. 824 pp. Boston. 1897.

A report on marriage and divorce in the United States, 1867 to 1886; including an appendix relating to marriage and divorce in certain countries in Europe. Carroll D. Wright. 1074 pp. Washington. 1889.

Population of the United States in 1860; compiled from the original returns of the eighth census, under the direction of the secretary of the interior Joseph C. G. Kennedy. 801 pp. Washington. 1864.

Statistics of the population of the United States at the tenth census (June 1, 1880), embracing extended tables of the population of states, counties, and minor civil divisions, with distinction of race, sex, age, nativity, and occupations; etc. 1038 pp. Charts and diagrams. Washington. 1883.

Compendium of the eleventh census. 1890. Part I. Population. Robert P. Porter. 1098 pp. Charts. Washington. 1892.

Report on the population of the United States at the eleventh census. 1890. Part I. 1038 pp. Charts. Washington. 1895. Part II. 999 pp. Washington. 1897. This part contains also a report on education in the United States at the eleventh census. 1890. James H. Blodgett. 141 pp. Washington. 1893.

Report on the insane, feeble-minded, deaf and dumb, and blind in the United States at the eleventh census. 1890. John S. Billings. 755 pp. Washington. 1895.

Report on crime, pauperism, and benevolence in the United States at the eleventh census. 1890. Part I. Analysis. Frederick H. Wines. 411 pp. Washington. 1896. Part II. General tables. F. H. W. 1035 pp. Washington. 1895.

Report on vital and social statistics in the United States at the eleventh census. 1890. Part I. Analysis and rate tables. John S. Billings. 1059 pp. Charts. Washington. 1896. Part. II. Vital statistics, cities of 100,000 population and upward. J. S. B. 1181 pp. Charts. Washington. 1896. Parts III. and IV. Statistics of deaths. J. S. B. 2084 pp. Washington. 1894, 1895.

Class VI., Section 8. — Public Health.

Massachusetts State Board of Health.

Annual report of the state board of health, lunacy, and charity of Massachusetts. Supplement containing the report and papers on public health. First, second, seventh (1879, 1880, 1885). Boston. 3 vols.

Annual report of the state board of health of Massachusetts. Pub. Doc. No. 30 (changed to 34). Tenth, eighteenth-twenty-first, twenty-fourth-twenty-eighth (1879, 1886-89, 1892-96). Boston. 10 vols.

Report of the state board of health upon the sewerage of the Mystic and Charles river valleys. 138 pp. Maps. Boston. 1889.

Examinations by the state board of health of the water supplies and inland waters of Massachusetts. 1887-90. Part I. of report on water supply and sewerage. 857 pp. Maps. Boston. 1890.

Epidemic cerebro-spinal meningitis and its relation to other forms of meningitis. A report of the state board of health of Massachusetts. 178 pp. 8 plates. Map. Boston. 1898.

Miscellaneous.

Report to the legislature of Massachusetts relating to the registry and return of births, marriages, and deaths in the Commonwealth. Pub. Doc. No. 1. Thirty-ninth (1880). Boston. Also fifty-first (1892). Pamphlet.

Annual report of the state board of health of the state of New Hampshire. Eighth (1889). 367 pp. Ill. Manchester.

Proposed plan for a sewerage system, and for the disposal of the sewage of the city of Providence. Samuel M. Gray. 146 pp. 27 plates. Maps. Providence. 1884.

Report on the sale of bad meat in Boston. City Doc. No. 74. 93 pp. Boston. 1871.

Annual report of the health department, city of Boston. 1895-98. Unbound.

CLASS VI., SECTION 9. — MISCELLANEOUS.

Census.

A compendium of the census of Massachusetts. 1875. Carroll D. Wright. 321 pp. Boston. 1877.

The census of Massachusetts. 1880. Compiled by authority of the legislature, from the returns of the tenth census of the United States. Carroll D. Wright. 698 pp. Boston. 1883.

Abstract of the eleventh census. 1890. Second edition, revised and enlarged. 300 pp. Washington. 1896.

Report on statistics of churches in the United States at the eleventh census. 1890. Henry K. Carroll. 812 pp. Maps. Washington. 1894.

Report on mineral industries in the United States at the eleventh census. 1890. David T. Day. 858 pp. Ill. Charts and maps. Washington. 1892.

Report on insurance business in the United States at the eleventh census. 1890. Part I. Fire, marine, and inland insurance. Charles A. Jenney. 1127 pp. Washington. 1894. Part II. Life insurance. C. A J. 478 pp. Washington. 1895.

Compendium of the eleventh census. 1890. Miscellaneous statistics. Part II. 1064 pp. Washington. 1894. Part III. 1150 pp. Washington. 1897.

Miscellaneous.

Statistical abstract of the United States. Twentieth, twenty-first (1897, 1898). Treasury department. Washington. 2 vols.

Consular reports. Commerce, manufactures, etc. Vols. LIV., LV., LVII-LIX. (Nos 200-207, 212-223), 1897-99. State department. Washington 5 vols.

Hubbard's newspaper and bank directory of the world (with gazetteer and atlas combined), etc. 2591 pp. New Haven. 1882. 2 vols.

Manual for the use of the general court, etc. 1862, 1885-99. Boston. 16 vols.

Smull's legislative hand book and manual of the state of Pennsylvania. 1896. Compiled and published under direction of Thos. B. Cochran. 1117 pp. Harrisburg.

Massachusetts year book and city and town register. Alfred S. Roe. 1895-98. Worcester. 4 vols.

American agriculturist year book and almanac. Herbert Myrick. 1898, 1899. Springfield, Mass. 2 vols.

Practical statistics: a handbook for the use of the statistician at work, students in colleges and academies, agents, census enumerators, etc. Charles F. Pidgin. 201 pp. Boston. 1888.

Class VII., Section 1. — Education, Reports.

The Massachusetts system of common schools; being an enlarged and revised edition of the tenth annual report of the first secretary of the Massachusetts board of education. Horace Mann. 285 pp. Boston. 1849.

Annual report of the board of education: together with the annual report of the secretary of the board. Pub Doc. No. 2. Forty-fifth, fifty-fourth (1880, 1890), John W. Dickinson; fifty-eighth, sixtieth-sixty-second (1893, 1896-98), Frank A. Hill. Boston. 6 vols.

Report of the commission appointed to investigate the existing systems of manual training and industrial education. 320 pp. Ill. Boston. 1893.

Report of the commissioner of education. 1883-84. John Eaton. Washington. 1885.

History of higher education in Massachusetts. George Gary Bush. 445 pp. Ill. Bureau of education. Washington. 1891.

Pamphlets.

Contributions to the history of education. Historical sketches of the universities and colleges of the United States. Edited by Franklin B. Hough. 72 pp. Ill. Bureau of education. Washington. 1883.

Circular of information of the bureau of education. No. 4. 1884. 176 pp. Washington. 1884.

Class VII., Section 2. — Educational Institutions, Reports.

Maine. — Annual reports of the trustees, and officers of the state college of agriculture and the mechanic arts. 1883. 106 pp. Ill. Orono. Pamphlet.

New Hampshire. — Report of the board of trustees of the college of agriculture and mechanic arts to the New Hampshire legislature. Eighteenth (1889). Manchester. 1 vol. Ill.

Vermont. — Catalogue of the university of Vermont and state agricultural college. 1894-95. 117 pp. Burlington. Pamphlet.

Massachusetts. — Annual report of the Massachusetts agricultural college. First-thirty-sixth (1863-99). Pub. Doc. No. 31. Boston. 4 vols. Ill.

Massachusetts agricultural college. Miscellaneous papers and catalogues. 1851-97. 1 vol. Ill.

Boston university year book. Vols. XVIII., XX., XXV. (1891, 1893, 1898). Historical register of Boston university. 1869-91. 167 pp. Unbound.

Massachusetts institute of technology, Boston. Twenty-sixth annual catalogue. 1890-91. 219 pp. Unbound.

New Jersey. — Catalogue of the Baron de Hirsch agricultural and industrial school. 1898. 21 pp. Ill. Woodbine. Pamphlet.

Ohio. — Annual catalogue Case school of applied science. 1896-97. 143 pp. Cleveland. Pamphlet.

Michigan. — Catalogue of the officers and students of the state agricultural college of Michigan, etc. Thirty-fourth year (1890-91). 66 pp Ill. Agricultural college, Michigan. Pamphlet.

North Dakota. — North Dakota agricultural college. First annual catalogue. 1892. 52 pp. Fargo. Pamphlet.

Arizona. — The university of Arizona. Third annual register. 1893-94. 92 pp. Tucson. Pamphlet.

Canada. — Ontario agricultural college and experimental farm. Ninth-nineteenth annual reports (1883-93). Toronto. 3 vols. Ill.

Wurtemburg. — Beschreibung der land-und forstwirthschaftlichen Akademie Hohenheim. (Description of the agricultural school and school of forestry at Hohenheim.) 324 pp. Ill. Stuttgart. 1863.

Japan — Imperial university of Japan. The calendar. XXII.-XXVI. Meiji (1889-93). The imperial university calendar. 2553-2558 (1893-98). Tokyo. Unbound.

Sapporo agricultural college. Sixth report (1881-86). 157 pp. Sapporo. Pamphlet.

New South Wales. — Annual report of the Hawkesbury agricultural college and experimental farm. 1895. Richmond, N. S. W. 54 pp. Pamphlet.

Class VII., Section 3. — Encyclopædias.

1821. The domestic encyclopedia: or a dictionary of facts and useful knowledge chiefly applicable to rural and domestic economy. With an appendix containing additions in domestic medicine, and the veterinary and culinary arts. The whole illustrated with numerous engravings and cuts. A. F. M. Willich. Second American edition, with additions, by Thomas Cooper. Philadelphia. 3 vols.

1825. An encyclopædia of gardening; comprising the theory and practice of horticulture, floriculture, arboriculture, and landscape-gardening, including all the latest improvements; a general history of gardening in all countries, etc. J. C. Loudon. Third edition. 1226 pp. London. 2 vols. Ill.

1826. An encyclopædia of agriculture; comprising the theory and practice of the valuation, transfer, laying out, improvement, and management of landed property; and the cultivation and economy of the animal and vegetable productions of agriculture, including

all the latest improvements; a general history of agriculture in all countries, etc. J. C. London. 1233 pp. London. 2 vols. Ill.

1844. The farmer's encyclopædia, and dictionary of rural affairs; embracing all the most recent discoveries in agricultural chemistry. Adapted to the comprehension of unscientific readers. Illustrated by numerous engravings of animals, implements, and other subjects interesting to the agriculturist. Cuthbert W. Johnson. Adapted to the United States. Philadelphia. 2 vols. Ill.

1852. A family-text book for the country; or the farmer at home: being a cyclopædia of the more important topics in modern agriculture, and in natural history and domestic economy; adapted to rural life. Rev. John L. Blake. 475 pp. Ill. New York.

The rural cyclopædia, or a general dictionary of agriculture, and of the arts, sciences, instruments, and practice, necessary to the farmer, stockfarmer, gardener, forester, landsteward, farrier, etc. Edited by the Rev. John M. Wilson. Edinburgh and London 4 vols. Ill.

1855. A cyclopedia of agriculture, practical and scientific; in which the theory, the art, and the business of farming, are thoroughly and practically treated. By upwards of fifty of the most eminent practical and scientific men of the day. Edited by John C. Morton. Glasgow, Edinburgh and London. 2 vols. Ill.

1894. The Century cyclopedia of names. Edited by Benjamin E. Smith. 1085 pp. New York.

The encyclopædia Britannica. A dictionary of arts, sciences, and general literature. With American revisions and additions by W. H. DePuy. Ninth edition. Chicago. 25 vols. Ill.

Class VII., Section 4.— Dictionaries.

1797. The New England farmer; or georgical dictionary. Containing a compendious account of the ways and methods in which the important art of husbandry, in all its various branches, is, or may be, practised, to the greatest advantage, in this country. Samuel Deane. The second edition, corrected, improved and enlarged, by the author. 397 pp. Worcester, Mass.

1803. The sporting dictionary, and rural repository of general information upon every subject appertaining to the sports of the field. William Taplin. 2 vols. 1032 pp. Ill. London.

1807. The gardener's and botanist's dictionary; containing the best and newest methods of cultivating and improving the kitchen, fruit, and flower garden, and nursery, or performing the practical parts of agriculture; of managing vineyards, and of propagating all sorts of timber trees. By the late Philip Miller. To which are now first added, a complete enumeration and description of all plants hitherto known, with their generic and specific characters, etc. Thomas Martyn. 2 vols. 4 parts. Ill. London.

1817. A geographical dictionary, or universal gazetteer; ancient and modern. J. E Worcester. Vol. I. A to Lyth. Andover, Mass.

1846. The farmer's dictionary: a vocabulary of the technical terms recently introduced into agriculture and horticulture from various

sciences, and also a compendium of practical farming: etc. Edited by D. P. Gardner. 876 pp. Ill. New York.

1847. A dictionary of modern gardening. George William Johnson. With one hundred and eighty wood cuts. Edited, with numerous additions, by David Landreth. 635 pp. Philadelphia.

1855. A comprehensive pronouncing and explanatory dictionary of the English language, with vocabularies of classical, scripture and modern geographical names. Joseph E. Worcester. Revised, with important additions. 526 pp. Boston.

1856. A dictionary, practical, theoretical, and historical, of commerce and commercial navigation illustrated with maps and plans. J. R. McCulloch. A new edition, corrected and improved; with a supplement. 1480 pp. London.

1885. An American dictionary of the English language. Noah Webster. Thoroughly revised, and greatly enlarged and improved, by Chauncey A. Goodrich and Noah Porter. With an appendix of useful tables, etc. New edition, with supplement. 1924 pp. Ill. Springfield, Mass.

1889 (?). The Century dictionary. An encyclopedic lexicon of the English language. Prepared under the superintendence of William Dwight Whitney. New York. 6 vols. Ill.

CLASS VII., SECTION 5.—HISTORY.

1831. The library of entertaining knowledge. Historical parallels. 2 vols. 822 pp. Ill. London. 1831, 1835.

Ditto. Paris and its historical scenes. 2 vols. 714 pp. Ill. London.

1832. Ditto. Criminal trials. David Jardine. Vol I. 520 pp. London. Vol. II. The gunpowder plot. 409 pp. London. 1835.

1848. Notes of a military reconnoissance, from Fort Leavenworth, in Missouri, to San Diego, in California, including part of the Arkansas, Del Norte, and Gila rivers. Lieut.-Col. W H. Emory, Lieut. J. W. Abert, Lieut.-Col. P. St George Cooke, and Capt. A. R. Johnston. 614 pp. Ill. Washington.

1849. The documentary history of the state of New-York; arranged under the direction of the Hon. Christopher Morgan. E. B. O'Callaghan. Ill. Maps and charts. Albany. Vols. I.-IV. (1849, 1851). 4 vols.

1853. Records of the governor and company of the Massachusetts Bay in New England. Edited by Nathaniel B. Shurtleff. 1628-86. Boston. Vols. I.-V. (1853, 1854). 6 vols.

1856. Canada at the universal exhibition of 1855 (Paris). 463 pp. Ill. Toronto.

1856. Debates and proceedings in the convention of the Commonwealth of Massachusetts, held in the year 1788, and which finally ratified the constitution of the United States. 442 pp. Boston.

Narrative of the expedition of an American squadron to the China seas and Japan, performed in the years 1852, 1853, and 1854, under the command of Commodore M. C. Perry, United States Navy. Francis L. Hawks. 537 pp. Ill. Washington.

1870. Record of the Massachusetts volunteers. 1861-65. Vol. II. 1085 pp. Boston.

1872. Journal of the proceedings of the United States centennial commission, at Philadelphia. 1872. 82 pp. Philadelphia.

1888. Harpers' popular cyclopædia of United States history from the aboriginal period. Containing brief sketches of important events and conspicuous actors. Benson J. Lossing. Illustrated by over one thousand engravings. Revised and enlarged edition. New York and Springfield, Mass. 2 vols.

1891. The farmers' alliance history and agricultural digest. Written by a board of editors. Editor-in-chief, N. A. Dunning. 742 pp. Ill. Washington.

1892. Essex institute. Historical collections. Vols. XXIX.-XXXI. (1892-95). Salem, Mass. 1 vol. Ill.

1894. Report of the Massachusetts board of world's fair managers. 246 pp. Ill. Boston

Brook farm. Historic and personal memoirs. John Thomas Codman. 335 pp. Boston.

1896. A compilation of the messages and papers of the presidents. Published by authority of Congress by James D. Richardson. Vols. I.-IX. (1789-1897). 9 vols. Ill. Washington.

Pamphlets.

Kansas state historical society. Eighth biennial report of the board of directors (1890-92). 134 pp. Topeka. 1890.

The story of New Sweden as told at the quarter centennial celebration of the founding of the Swedish colony in the woods of Maine. 138 pp. Ill. Portland, Me. 1896.

CLASS VII., SECTION 6.—BIOGRAPHY.

1842. Biographical notices of distinguished men in New England: statesmen, patriots, physicians, lawyers, clergymen, and mechanics. Alden Bradford. 464 pp. Boston.

1849. Memorials of John Bartram and Humphry Marshall. With notices of their botanical contemporaries. William Darlington. 585 pp. Ill. Philadelphia.

1856. Proceedings at the reception and dinner in honor of George Peabody, Esq., of London, by the citizens of the old town of Danvers, October 9, 1856. To which is appended an historical sketch of the Peabody institute, etc. 195 pp. Ill. Boston.

1883. Proceedings at a banquet given by his friends to the Hon. Marshall Pinckney Wilder, on his birthday, Sept. 22, 1883, to commemorate the completion of his eighty-fifth year. 115 pp. With portrait. Cambridge, Mass.

Pamphlets.

Memorial of Benjamin P. Johnson. Read before the New York state agricultural society by Marsena R. Patrick. 52 pp. Albany. 1870.

A biographical directory of American agricultural scientists. Edited by Charles S. Plumb. 100 pp. Knoxville, Tenn. 1889.

Addresses, letters and resolutions commemorative of Daniel Needham of Groton, Mass. A memorial volume. 37 pp. Portrait. Ayer, Mass. 1895.

Stephen Lincoln Goodale. His life work in behalf of Maine agriculture. Address by Samuel L. Boardman. 24 pp. Portrait. Augusta, Me. 1898.

CLASS VII., SECTION 7. — ATLASES.

1883 (?). Scribner's statistical atlas of the United States, showing by graphic methods their present condition and their political, social and industrial development. Fletcher W. Hewes and Henry Gannett. 120 pp. 151 plates. New York.

1886. Bradley's atlas of the world for commercial and library reference. 75 maps, with isometric index to them. Philadelphia.

1891 (?). Atlas of Massachusetts, compiled under the direction of O. W. Walker. 231 pp. Boston.

1892. Grant's bankers' and brokers' railroad atlas. Compiled and published by A. A. Grant. 451 pp. New York.

1897. The Century atlas of the world. Prepared under the superintendence of Benjamin E. Smith. 382 pp. of index. 117 maps. New York.

1898. New topographical atlas of the county of Worcester, Massachusetts, containing fifty-five double-page maps, in colors, of the cities and towns of the county, etc. Philadelphia.

Statistical atlas of the United States, based upon results of the eleventh census. Henry Gannett. 69 pp. 63 plates. Washington.

CLASS VII., SECTION 8. — HAND BOOKS.

1845. The industrial resources of Ireland. Robert Kane. Second edition. 438 pp. Charts. Dublin, London and Edinburgh.

1851. Notes on North America: agricultural, economical and social. James F. W. Johnston. 2 vols. 927 pp. Map. Boston, Edinburgh and London.

1875. The official handbook of New Zealand. A collection of papers by experienced colonists on the colony as a whole, and on the several provinces. Edited by Sir Julius Vogel. Second edition. 272 pp. Ill. Map. London.

Notes on the colony of Victoria; historical, geographical, meteorological and statistical. Henry Heylyn Hayter. 240 pp. Maps. Melbourne and London.

1879. Handbook of North Carolina, embracing historical and physiographical sketches of the state, with statistical and other information relating to its industries, resources and political condition. L. L. Polk. 291 pp. Raleigh.

1882. Hand-book of Tennessee. Prepared by A. W. Hawkins, assisted by Henry E. Colton. 168 pp. Map. Knoxville.

1883. Colorado as an agricultural state. Its farms, fields, and garden lands. William E. Pabor. 213 pp Ill. New York.

1884. The Australian in America. Being the letters of J. L. Dow,

M. P., the special correspondent of the "Leader." 176 pp. Melbourne.

1888. The Queensland illustrated guide; for the use of farmers, fruit-growers, vignerons, and others. Henry Jordan. 222 pp. Ill. Map. Brisbane.

A gazetteer of the state of Massachusetts. Rev. Elias Nason. Revised and enlarged by George J. Varney. 724 pp. Ill. Boston.

1891. Hand book of the American republics. Bureau of the American republics. Bulletin No. 1, January, 1891. 288 pp. Ill. Washington. Bulletin No. 2, February, 1891. Enlarged and revised edition. 486 pp. Ill. Map. Washington.

1892. Tennessee. Its resources, capabilities, and development. Illustrated by graphics. D. G. Godwin. Nashville.

1893. Letters from Queensland by the "Times" special correspondent. Reprinted from the "Times" of December, 1892, January and February, 1893. 110 pp. London and New York.

Virginia: a hand-book, giving its history, climate, and mineral wealth; its educational, agricultural and industrial advantages. Thomas Whitehead. 341 pp. Ill. Map. Richmond.

Report on population and resources of Alaska at the eleventh census. 1890. 282 pp. Ill. Maps. Washington.

Alabama as it is; or, the immigrants and capitalist's guide book to Alabama. Rev. B. F. Riley. Third edition carefully revised to date. 328 pp. Ill. Montgomery.

1896. North Carolina and its resources. Illustrated. State board of agriculture. 413 pp. Map. Winston.

Pamphlets.

The Vineyard, as it was, is, and is to be. From authentic pencillings. By an observer. 96 pp. New Bedford, Mass. 1872.

Report of J. Thomas Scharf, commissioner of the land office of Maryland, to Governor Elihu E. Jackson, with a series of carefully prepared articles on Maryland's resources, with a description of every county in the state and the city of Baltimore. 114 pp. Annapolis. 1888.

North Dakota. A few facts concerning its resources and advantages. By the state commissioner of agriculture and labor. 72 pp. Bismarck. 1892.

British Columbia, its present resources and future possibilities. A brief attempt to demonstrate the value of the province. 109 pp. Ill. Victoria. 1893.

The southland. An exposition of the present resources and development of the south. Frank Presbrey. Unpaged. Ill. New York. 1898.

Nova Scotia. Its agricultural resources. B. W. Chipman, secretary for agriculture. 40 pp. Map. Halifax. 1898.

Class VII., Section 9. — Almanacs, Calendars.

1805. The farmer's almanack, calculated on a new and improved plan, for the year of our Lord, etc. Fitted for Boston, but will answer for all the New England states. Established in 1793, by Robert B. Thomas. Nos. XIII.-98. 1805-90. Boston. 7 vols. Also years 1797-1804, 1891-99 unbound.

1854. The American almanac and repository of useful knowledge. 1854-57, 1860. Boston, London and Paris. 5 vols.

1856. Haus-und landwirthschafts-Kalender des landwirthschaftlichen vereins in Bayern. 1856, 1863-67, 1872, 1873, 1875, 1876, 1878, 1879, 1884, 1888-99. 25 Nos. Ill. München. 16 vols.

Class VIII., Section 1. — Law.

Acts and laws of the Commonwealth of Massachusetts. 1780-91. Boston. 6 vols.

Acts and resolves passed by the general court of Massachusetts, together with the rolls and messages, etc. 1845, 1846, 1848, 1849. Boston. 4 vols.

Acts and resolves passed by the general court of Massachusetts, together with the messages, etc. 1851-98. Boston. 35 vols.

Private and special statutes of the Commonwealth of Massachusetts. Vols. IX., X., XIII., XIV. (1849-59, 1871-81). Boston. 4 vols.

The revised statutes of the Commonwealth of Massachusetts, to which are prefixed the constitutions of the United States, etc. Printed and published under the supervision and direction of Theron Metcalf and Horace Mann. 1007 pp. Boston. 1836.

Supplements to the revised statutes. Laws of the Commonwealth of Massachusetts, passed subsequently to the revised statutes. 1836 to 1849 inclusive. Theron Metcalf and Luther S. Cushing. 611 pp. Boston. 1849.

The general statutes of the Commonwealth of Massachusetts: to which the constitutions of the United States and the Commonwealth of Massachusetts are prefixed, etc. William A. Richardson and George P. Sanger. 1126 pp. Boston. 1860.

The public statutes of the Commonwealth of Massachusetts, etc., to take effect Feb. 1, 1882. Charles Allen, Uriel H. Crocker and James M. Barker. 1405 pp. Boston. 1886.

An index to the public statutes of the Commonwealth of Massachusetts and to the public acts of 1882 to 1887, both inclusive. William V. Kellen. 559 pp. Boston. 1888.

Supplement to the public statutes of the Commonwealth of Massachusetts, etc. 1882-88. C. A. Merrill. 1500 pp. Boston. 1890. Ditto. 1889-95. Charles N. Harris. 1727 pp. Boston. 1897.

Manual for the use of boards of health of Massachusetts, containing statutes relating to the public health, etc. Prepared at the direction of the state board of health. 237 pp. Boston. 1897.

The road and the roadside. Burton Willis Potter. Third edition, revised and enlarged. 250 pp. Boston. 1893.

Acts relating to agriculture in the Province of Ontario. 49 pp. Toronto. 1895.

The business man's adviser: consisting of the business man's assistant and ready reckoner; the trader's guide; and the landlord's and tenant's assistant. I. R. Butts, assisted by members of the bar. 364 pp. Boston. 1858.

United States duties on imports. Revised, corrected, and supplemented. Lewis Heyl. Washington. 1879, 1882. 2 vols.

Ordinances and rules and orders of the city of New Bedford, together with the city charter and amendments thereto, and special statutes and other matter affecting the city. 405 pp. New Bedford. 1896.

Report of the attorney-general. Pub. Doc. No. 12. 1893, 1897. Boston.

The war revenue law of 1898 explained. John M. Gould and Edward H. Savary. 190 pp. Boston. 1898.

The law of the roadside. How to protect our landscape. Compiled by Augustus Hemenway and George Weston Anderson. 57 pp. Boston. Pamphlet.

Class VIII., Section 2.—Highways, Roads.

1850. Rudiments of the art of constructing and repairing common roads. Henry Law. To which is prefixed a general survey of the principal metropolitan roads, by S. Hughes. 136 pp. Ill. London.

1891. A move for better roads. Essays on roadmaking and maintenance and road laws, with a synopsis of other contributions and a review by the secretary, Lewis M. Haupt, also an introduction by William H. Rhawn. 319 pp. Philadelphia.

1893. Report of the commission to improve the highways of the Commonwealth. 238 pp. Ill. Boston.

1895. Annual report of the Massachusetts highway commission. Pub. Doc. No. 54. Second-sixth (1895-99). Boston. 5 vols. Ill.

1896. American highways. A popular account of their conditions and of the means by which they may be bettered. N. S. Shaler. 293 pp. Ill. New York.

Report of the Good roads association of the Province of Ontario: first, second (1893, 1894). Toronto. Pamphlets.

Report of the provisional instructor in road-making. Ontario. First-third (1896-98). Toronto. Pamphlets.

Class VIII., Section 3.—Peoples, Customs.

1830. The library of entertaining knowledge. The New Zealanders. 424 pp. Ill. Map. London.

1834. Ditto. The Hindoos. 2 vols. 785 pp. Ill. London. 1834, 1835.

1836. Ditto. The Chinese: a general description of the empire of China and its inhabitants. John Francis Davis, Esq. 2 vols. Ill. 854 pp. London.

Ditto. History of British costume. J. R. Planché. 376 pp. Ill. London.

1846. Ditto. An account of the manners and customs of the modern Egyptians, written in Egypt during the years 1833, 34, and 35. Edward William Lane. 2 vols. 847 pp. Ill. London.

1894. Report on Indians taxed and Indians not taxed in the United States (except Alaska) at the eleventh census. 1890. 683 pp. Ill. Maps and charts. Washington.

Class VIII., Section 4. — Domestic Economy.

1830. Domestic economy. Vol. I. Containing brewing, distilling, wine-making, baking. Michael Donovan. 376 pp. London. Vol. II. Human food. Animal and vegetable. By M. D. New edition. 388 pp. London.

1832. The library of entertaining knowledge. Vegetable substances used for the food of man. 396 pp. Ill. London.

1845. Fruits and farinacea the proper food of man; being an attempt to prove, from history, anatomy, physiology, and chemistry, that the original, natural, and best diet of man is derived from the vegetable kingdom. John Smith. 422 pp. London.

1860. A guide to the food collection in the South Kensington museum. Edwin Lankester. Third edition. 149 pp. London.

1873. Foods. Edward Smith. 485 pp. Ill. New York.

Class VIII., Section 5. — Mechanics, Engineering.

1752. Navigation new modelled: or, a treatise on geometrical, trigonometrical, arithmetical, instrumental, and practical navigation, etc. The seventh edition, with the addition of spherical trigonometry and astronomy. Henry Wilson. 527 pp. Ill. London.

1831. The operative mechanic, and British machinist; being a practical display of the manufactories and mechanical arts of the United Kingdom. John Nicholson. Second American from the third London edition, with additions. 2 vols. 808 pp. Ill. Philadelphia.

1850. Rudimentary treatise on limes, cements, mortars, concretes, mastics, plastering, etc. George R. Burnell. 124 pp. London.

1853. On economy of fuel, particularly with reference to reverberatory furnaces for the manufacture of iron, and to steam boilers. T. Symes Prideaux, Esq. 128 pp. Ill. London.

1875. Vienna international exhibition, 1873. Civil engineering, public works, and architecture. William Watson. 96 pp. Ill. Washington.

1893. Annual report of the city engineer, Boston. Twenty-seventh, twenty-eighth (1893, 1894). Ill. Boston. 2 vols.

Class VIII., Section 6. — Heating, Ventilation.

1885. Ventilation of buildings. W. F. Butler. Re-edited and enlarged by James L. Greenleaf. 147 pp. Ill. New York.

1889. Report of the chief of the Massachusetts district police, including the inspection department and the detective department. Pub. Doc. No. 32. 1889-98. Boston. 10 vols. Ill.

An inquiry into the influence upon health of anthracite coal when used as fuel for warming dwelling-houses, with some remarks upon special evaporating apparatus. George Derby. 46 pp. Boston. 1868. Pamphlet.

CLASS VIII., SECTION 7. — POLITICAL ECONOMY.

1793. An inquiry into the nature and causes of the wealth of nations. Adam Smith. In three volumes. The seventh edition. Vols. II. and III. London.

1837. Principles of political economy. Part the first: of the laws of the production and distribution of wealth. H. C. Carey. 342 pp. Philadelphia. 1837. Part the second: of the causes which retard increase in the production of wealth, and improvement in the physical and moral condition of man. H. C. C. 466 pp. Philadelphia. 1838.

1851. Des institutions de crédit foncier et agricole dans les divers états de L'Europe. Nouveaux documents recueillis par ordre de M. Dumas, et publiés par M. J. B. Josseau, avec la collaboration de MM. H. de Chonski et Delaroy. 563 pp. Paris.

1857. The nature and uses of money and mixed currency, with a history of the Wickaboag bank. Amasa Walker. 83 pp. Boston.

1866. Rural economy; practical observations on the relative position of landlord and tenant. F. Fisher Cattlin. 28 pp. London and Windsor.

1888. Cyclopædia of political science, political economy, and of the political history of the United States, by the best American and European writers. Edited by John J. Lalor. New York. 3 vols.

CLASS VIII., SECTION 8. — LIBRARY.

1879. Catalogue of the Flint public library, of the town of Middleton. 84 pp. Salem, Mass.

1880. Catalogue of the state library of Massachusetts. 1048 pp. Boston.

1893. Catalog of "A. L. A." library. Five thousand volumes for a popular library selected by the American library association and shown at the world's columbian exposition. 592 pp. Washington.

Statistics of public libraries in the United States and Canada. Weston Flint. 213 pp. Washington.

Report of the librarian of the state library, and annual supplement to the general catalogue. Fourteenth and eighteenth supplements (1893, 1897). Pub Doc. No. 3. Boston. 2 vols.

1899. Ninth report of the free public library commission of Massachusetts. Pub. Doc. No. 44. 465 pp. Ill. Boston.

CLASS VIII., SECTION 9. — GENERAL MISCELLANY.

1812. Archives of useful knowledge. A work devoted to commerce, manufactures, rural and domestic economy, agriculture, and the useful arts. Published quarterly. James Mease. Vols. II., III. Philadelphia. 1812, 1813.

1819. Transactions of the society of arts of the state of New York, for 1819. Vol. IV. Part II. 358 pp. Ill.

1848. Annual report of the trustees of the state reform school, at Westborough, together with the annual reports of the officers of the institution. First-eighth (1848-55). Ill. Boston.

1854. Report of the superintendent of the coast survey, showing the progress of the survey. 1854-56, 1860-62. Ill. Charts and diagrams. Washington. 6 vols.

1855. Rules of proceeding and debate in deliberative assemblies. Luther S. Cushing. 189 pp. Boston.

1856. Maps, reports, estimates, etc., relative to improvements of the navigation of the river St. Lawrence, and a proposed canal connecting the river St. Lawrence and Lake Champlain. 40 pp. Toronto.

1865. Facts about peat as an article of fuel. Compiled by T. H. Leavitt. 120 pp. Boston.

1871 (?). Hints and helps for those who, write, print, or read. Benjamin Drew. 131 pp. Boston and New York.

1879 (?). Regulations for the Massachusetts volunteer militia. 551 pp. Boston.

1885. Histoire des enfants abandonnés et délaissés. Études sur la protection de l'enfance aux diverses époques de la civilisation. Par Lèon Lallemand. 791 pp. Paris.

1890. Commonwealth of Massachusetts. The journal of the senate. 1890-98. Boston. 9 vols.

Commonwealth of Massachusetts. Journal of the house of representatives of the Commonwealth of Massachusetts. 1890-98. Boston. 9 vols.

1895. City documents, New Bedford. Mayor's address to the city council, city government, annual reports, etc., for the year 1895-96.

1898. Report of the joint board consisting of the harbor and land commissioners and the state board of health, upon the restoration of Green harbor in the town of Marshfield, Mass. 67 pp. Maps. Boston.

The index. Published annually by the junior class of the Massachusetts agricultural college. Vols. XVII., XVIII., XX.-XXVI., XXVIII.-XXX. (classes of 1887, 1888, 1890-96, 1898-1900). Amherst. 12 vols.

Aggie life, published fortnightly by students of the Massachusetts agricultural college. Vols. I.-IX. (1890-99). Amherst. Unbound.

There are also in the library unbound publications representing the countries of Brazil, Costa Rica, Mexico, France, England, Germany, Russia, Sweden, Italy, Austria, Switzerland, Denmark, Belgium, Baden, Prussia, and Australia, which it has not seemed wise to catalogue at the present time.

INDEX.

	PAGE
United States Department of Agriculture, Publications,	11
Experiment Stations, Publications,	17
Boards of Agriculture, etc., Reports,	24
Agricultural Societies, Transactions,	28
Farmers' Institutes, Proceedings,	31
Crop Reports,	31
Grange Proceedings,	32
Dairy Associations, etc., Reports,	32
Produce Exchanges, etc., Reports,	34
Agricultural Journals, etc.,	34
Agriculture, Theory and Practice,	37
Manures and Fertilizers,	44
Drainage and Irrigation,	46
Farm Implements, Machinery, Buildings,	47
Field Crops,	48
Market Gardening, Vegetables, Mushrooms,	52
Glass Houses: Construction, Management, Crops,	54
Milk, Butter, Cheese,	54
Bees and Bee Keeping (Apiculture),	55
Horticultural Societies, etc., Transactions,	57
Horticulture, General Works,	58
Flowers (Floriculture),	59
Forestry (Arboriculture),	62
Landscape Gardening, Rural Architecture,	65
Botany, Vegetable Physiology,	66
Plant Diseases: Fungi and Fungicides,	69
Grapes (Viticulture),	70
Fruits (Pomology),	71
Cattle: Breeds, Herd Books,	75
Cattle Raising (Dairying),	77
Veterinary Science, Animal Diseases,	80
Sheep and Wool,	84
Swine,	85
Horses,	86
Dogs,	89

INDEX.

	PAGE
Cats, Rabbits, etc.,	90
Poultry (Aviculture),	90
Chemistry,	91
Geology, Mineralogy, Soils,	94
Natural History, Zoölogy,	96
Biology, Evolution, etc.,	98
Insects and Insecticides (Entomology),	99
Birds (Ornithology),	103
Climate, Weather (Meteorology),	106
Fish and Fish Culture (Pisciculture),	106
Smithsonian Institution, etc., Reports,	107
Agriculture (Statistics),	108
Manufactures,	109
Labor,	110
Transportation, Commerce,	110
Finance,	111
Taxation, Revenue,	111
Population, Social,	111
Public Health,	112
Miscellaneous Statistics,	113
Education, Reports,	114
Educational Institutions, Reports,	114
Encyclopædias,	115
Dictionaries,	116
History,	117
Biography,	118
Atlases,	119
Hand Books,	119
Almanacs, Calendars,	121
Law,	121
Highways, Roads,	122
Peoples, Customs,	122
Domestic Economy,	123
Mechanics, Engineering,	123
Heating, Ventilation,	123
Political Economy,	124
Library,	124
General Miscellany,	124